

6-Year Performance Data Annual Performance Goals and Measures

GOAL: CLEAN AIR AND GLOBAL CLIMATE CHANGE

Protect and improve the air so it is healthy to breathe and risks to human health and the environment are reduced. Reduce greenhouse gas intensity by enhancing partnerships with businesses and other sectors.

OBJECTIVE: HEALTHIER OUTDOOR AIR

Through 2010, working with partners, protect human health and the environment by attaining and maintaining health-based air-quality standards and reducing the risk from toxic air pollutants.

Reduce Air Toxic Emissions

- In 2005 Air toxics emissions nationwide from stationary and mobile sources combined will be reduced by an additional 1% of the updated 1993 baseline of 6.0 million tons for a cumulative reduction of 38%.
- In 2004 Air toxics emissions nationwide from stationary and mobile sources combined will be reduced by an additional 2% of the updated 1993 baseline of 6.0 million tons for a cumulative reduction of 37%.
- In 2003 End-of-year- FY 2003 data will be available in late 2009 to verify that air toxics emissions nationwide from stationary and mobile sources combined will be reduced by an additional 1% of the updated 1993 baseline of 6.0 million tons for a cumulative reduction 35%.
- In 2002 End-of-year FY 2002 data will be available in late 2006 to verify that air toxics emissions nationwide from stationary and mobile sources combined will be reduced by 1.5% from 2001 for a cumulative reduction of 33.5% from the 1993 baseline of 6.0 million tons per year.
- In 2001 End-of-year FY 2001 data will be available in late 2006 to verify that air toxics emissions nationwide from stationary and mobile sources combined will be reduced by 5% from 2000 (for a cumulative reduction of 35% from the 1993 level of 4.3 million tons.)
- In 2000 End-of-year FY 2000 data will be available in late 2006 to verify that air toxics emissions nationwide from stationary and mobile sources combined will be reduced by 3% from 1999 (for a cumulative reduction of 30% from the 1993 level of 4.3 million tons.)

Performance Measures	FY 2000 Actuals	FY 2001 Actuals	FY 2002 Actuals	FY 2003 Actuals	FY 2004 Pres. Bud.	FY 2005 Pres. Bud.	
Combined Stationary and Mobile Source Reductions in Air Toxics Emissions	Data Lag	Data Lag	Data Lag	Data Lag	2	1	Percent
Mobile Source Air Toxics Emissions Reduced					.71	.80	Million Tons
Stationary Source Air Toxics Emissions Reduced					1.59	1.59	Million Tons
Major Sources, Area and All Other Air Toxics Emissions Reduced					+13	+14	Million Tons

Baseline: In 1993, the last year before the MACT standards and mobile source regulations developed under the Clean Air Act began to be implemented, stationary and mobile sources are now estimated to have emitted 6.0 million tons of air toxics. (EPA's prior estimate was 4.3 million tons and was updated with improved inventory data.) Air toxics emission data are revised every three years to generate inventories for the National Toxics Inventory (NTI). In the intervening years between the update of the NTI, the model EMS-HAP (Emissions Modeling System for Hazardous Air Pollutants) is used to estimate and project annual emissions of air toxics. EMS-HAP projects emissions, by adjusting point, area and mobile emission data to account for growth and emission reductions resulting from emission reduction scenarios such as the implementation of the Maximum Achievable Control Technology (MACT) standards.

Reduce SO2 Emissions

- In 2005 Keep annual emissions below level authorized by allowance holdings and make progress towards achieving the year 2010 SO2 emissions cap for utilities. Annual emissions reduction target is 6.9 million tons from the 1980 baseline.
- In 2004 Maintain or increase annual SO2 emission reduction of approximately 5 million tons from the 1980 baseline. Keep annual emissions below level authorized by allowance holdings and make progress towards achievement of Year 2010 SO2 emissions cap for utilities.
- In 2003 End of year 2003 data will be available in the last quarter of 2004 to verify that annual emissions reduction of approximately 5 million tons from utility sources were maintained or increased during 2003.
- In 2002 SO2 emissions were reduced by 35% from the 1990 level of 15.9 million tons and approximately 40% from the 1980 level of 17.5 million tons. In 2001 Approximately 5 million tons of SO2 emissions from utility sources were reduced from the 1980 baseline.
- In 2000 6.3 million tons of SO2 emissions from utility sources were reduced from 1980 baseline.

Performance Measures	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	
	Actuals	Actuals	Actuals	Actuals	Pres. Bud.	Pres. Bud.	
SO2 Emissions	6,300,000	6,670,000	7,000,000	Data Lag	5,000,000	6,900,000	Tons Reduced

Baseline: The base of comparison for assessing progress on the annual performance goal is the 1980 emissions baseline. The 1980 SO2 emissions inventory totals 17.4 million tons for electric utility sources. This inventory was developed by National Acid Precipitation Assessment Program (NAPAP) and used as the basis for reductions in Title IV of the Clean Air Act Amendments. This data is also contained in EPA's National Air Pollutant Emissions Trends Report. Statutory SO2 emissions cap for year 2010 and later is at 8.95 million tons which is approximately 8.5 million tons below 1980 emissions level. "Allowable SO2 emission level" consists of allowance allocations granted to sources each year under several provisions of the Act and additional allowances carried over, or banked, from previous years.

Reduce NOx Emissions

- In 2003 End of year 2003 data will be available in Summer 2004 to verify that the Agency has achieved the annual emission reduction goal.
- In 2002 EPA reduced annual NOx emissions from coal-fired utility sources by 3.5 million tons from the modeled projections of NOx emissions that would have been emitted in 2000 without implementation of Title IV of the Clean Air Act Amendments.
- In 2001 2 million tons of NOx from coal-fired utility sources were reduced from levels that would have been emitted without implementation of Title IV of the Clean Air Act Amendments.
- In 2000 2 million tons of NOx from coal-fired utility sources were reduced from levels before implementation of Title IV of the Clean Air Act Amendments.

Performance Measures	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	
	Actuals	Actuals	Actuals	Actuals	Pres. Bud.	Pres. Bud.	
NOx Reductions	2,000,000	2,000,000	3,500,000	Data Lag			Tons Reduced

Baseline: Performance Baseline: The base of comparison for assessing progress on this annual performance goal is emissions that would have occurred in the absence of Title IV of the Clean Air Act Amendments.

Reduce Exposure to Unhealthy Ozone Levels - 1 Hour

- In 2005 The number of people living in areas with monitored ambient ozone concentrations below the NAAQS for the 1-hour ozone standard will increase by 4% (relative to 2004) for a cumulative total of 53% (relative to 1992).
- In 2004 The number of people living in areas with monitored ambient ozone concentrations below the NAAQS for the 1-hour ozone standard will increase by 4% (relative to 2003) for a cumulative total of 47% (relative to 1992).

- In 2003 Maintained healthy air quality for approx. 161.5 million people living in monitored areas attaining the ozone std; certified that 5 areas of the remaining 54 nonattainment areas have attained the 1-hour NAAQS for ozone thus increasing the no. of people living in areas with healthy air by 5.8 million.
- In 2002 Maintained healthy air quality for 155 million people living in monitored areas attaining the ozone standard; and certified 2 areas of the remaining 55 nonattainment areas attained the 1-hour NAAQS for ozone, thus increasing the number of people living in areas with healthy air by 3.6 million.
- In 2001 EPA maintained healthy air quality for 152 million people living in 43 areas attaining the ozone standard, increased by 170,000 the number of people living in areas with healthy air quality that have newly attained the standard by certifying that 3 new areas have attained the 1-hour standard.
- In 2000 Maintained healthy air quality for 152 million people living in 42 areas attaining the ozone standard.

Performance Measures	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	
	Actuals	Actuals	Actuals	Actuals Data Lag	Pres. Bud. 47	Pres. Bud. 53	
Cumulative Percent Increase in the Number of People who Live in Areas with Ambient 1-hour Ozone Concentrations Below the Level of the NAAQS as Compared to 1992							Percent
Cumulative Percent Increase in the Number of Areas with Ambient 1-hour Ozone Concentrations Below the Level of the NAAQS as Compared to 1992				Data Lag	55	40	Percent
Total Number of People who Live in Areas Designated to Attainment of the Clean Air Standards for Ozone	151,868,200	152,038,400	155,678,900	161,485,905	167,300,000	174,562,000	People
Areas Designated to Attainment for the Ozone Standard	0	1	2	5	5	6	Areas
Additional People Living in Newly Designated Areas with Demonstrated Attainment of the Ozone Standard	1,017,545	170,200	3,640,507	5,800,000	5,800,000	7,276,790	People
VOCs Reduced from Mobile Sources	1,562,000	1,659,000	1,755,000	1,900,000	2,040,000	855,624	Tons

Performance Measures	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	Tons
	Actuals	Actuals	Actuals	Actuals	Pres. Bud.	Pres. Bud.	
NOx Reduced from Mobile Sources	1,059,000	1,189,000	1,319,000	1,400,000	1,653,000	1,693,259	

Baseline: The 1992 baseline for population is the population in areas not classified or designated as attainment for the clean air national ambient air quality standards. The 1992 baseline for areas is those areas that are designated as non-attainment of the NAAQs. Through FY 2003, 161,485,905 people are living in areas designated to attainment; 51 areas are designated to attainment for this/these pollutants. The 2000 MOBILE 6 inventory is used as the baseline year for mobile source emissions as of FY 2005. The 2000 baseline for VOC emissions is 7.7 million tons; the baseline is 11.8 million tons. The 2000 MOBILE 6 inventory is used as the baseline year for mobile source emissions as of FY 2005. The 2000 baseline for VOC emissions is 7.7 million tons; the baseline is 11.8 million tons. Beginning in FY 2004, EPA changed the basis for evaluating progress for this measure to reflect actual measured levels of air quality. Previously, EPA had not defined an area as having clean air until the area was formally classified as having met health-based standards. The procedural requirements for classification may require a year or more to complete. The previous total population numbers were for 2000 – 33.4 million (m) 2001 – 38.2m; 2002- 41.7m; 2003 – 47.8m.

Reduce Exposure to Unhealthy PM Levels - PM-10

- In 2005 The number of people living in areas with monitored ambient PM concentrations below the NAAQS for the PM-10 standard will increase by 1% (relative to 2004) for a cumulative total of 7% (relative to 1992).
- In 2004 The number of people living in areas with monitored ambient PM concentrations below the NAAQS for the PM-10 standard will increase by 1% (relative to 2003) for a cumulative total of 6% (relative to 1992).
- In 2003 Maintained healthy air quality for 120 million people living in monitored areas attaining the PM standards; increased by 252 thousand the number of people living in areas with healthy air quality that have newly attained the standard.
- In 2002 Maintained healthy air quality for 120 million people living in monitored areas attaining the PM standards; and increased by 2.7 million the number of people living in areas with healthy air quality that have newly attained the standard.
- In 2001 EPA maintained healthy air quality for 117 million people living in 9 areas attaining the PM standards and increased by 2.2 million the number of people living in areas with healthy air quality that have newly attained the standard.
- In 2000 Maintained healthy air quality for 115 million people living in 7 areas attaining the PM standards, and increased by 18 thousand the number of people living in areas with healthy air quality that have attained the standard.

Performance Measures	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	
	Actuals	Actuals	Actuals	Actuals Data Lag	Pres. Bud. 6	Pres. Bud. 7	
Cumulative Percent Increase in the Number of People who Live in Areas with Ambient PM-10 Concentrations Below the Level of the NAAQSas Compared to 1992							Percent
Cumulative Percent Increase in the Number of Areas with Ambient PM-10 Concentrations Below the Level of the NAAQSas Compared to 1992				Data Lag	40	50	Percent
Total Number of People who Live in Areas Designated in Attainment with Clean Air Standards for PM	115,107,800	117,437,659	120,126,600	120,379,036	120,700,000	122,308,000	People
Areas Designated to Attainment for the PM-10 Standard	1	8	4	5	9	4	Areas
Additional People Living in Newly Designated Areas with Demonstrated Attainment of the PM Standard	18,587	2,239,859	2,688,990	252,387	380,000	1,549,648	People
PM-10 Reduced from Mobile Sources	20,000	22,000	23,000	25,000	18,000	62,161	Tons
PM-2.5 Reduced from Mobile Sources	15,000	16,500	17,250	18,000	13,500	61,217	Tons

Baseline:

The 1992 baseline for population is the population in areas not classified or designated as attainment for the clean air national ambient air quality standards. The 1992 baseline for areas is those areas that are designated as non-attainment of the NAAQS. Through FY 2003, 120,379,036 people are living in areas designated to attainment; 5 areas are designated to attainment for this/these pollutants. The 1995 baseline for PM-10 reduced from mobile

sources is 880,000 tons. The 2000 MOBILE 6 inventory is used as the baseline for mobile source emissions as of FY 2005. The 2000 baseline for PM 2.5 from mobile sources is 500,000 tons; the 2000 baseline for PM 2.5 from mobile sources is 613,000 tons. Beginning in FY 2004, EPA changed the basis for evaluating progress for this measure to reflect actual measured levels of air quality. Previously, EPA had not defined an area as having clean air until the area was formally classified as having met health-based standards. The procedural requirements for classification may require a year or more to complete. The previous total population numbers were for 2000 – 1.2 million (m) 2001 – 1.2m; 2002- 3.4m; 2003 – 6.2m.

Reduce Exposure to Unhealthy CO, SO₂, NO₂, Lead

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|---------|---|
| In 2005 | The number of people living in areas with monitored ambient CO, NO ₂ , SO ₂ , or Pb concentrations below the NAAQS will increase by less than 1% (relative to 2004) for a cumulative total of 53% (relative to 1992). |
| In 2004 | The number of people living in areas with monitored ambient CO, NO ₂ , SO ₂ , or Pb concentrations below the NAAQS will increase by 4% (relative to 2003) for a cumulative total of 53% (relative to 1992). |
| In 2003 | Maintained healthy air quality for 167 million people living in monitored areas attaining the CO, SO ₂ , NO ₂ , and Lead standards; increased by .435 million the number of people living in areas with healthy air quality that have newly attained the standard. |
| In 2002 | Maintained healthy air quality for 167 million people living in monitored areas attaining the CO, SO ₂ , NO ₂ , and Lead standards; and increased by 16.5 million, the number of people living in areas with healthy air quality that have newly attained the standard. |
| In 2001 | EPA maintained healthy air quality for 150 million people living in 91 areas attaining the CO, SO ₂ , NO ₂ , and Lead standards and increased by 418,000 the number of people living in areas with healthy air quality that have newly attained the standard. |
| In 2000 | Maintained healthy air quality for 150 million people living in 82 areas attaining the CO, SO ₂ , NO ₂ , and Lead standards, and increased by 4.5 million the number of people living in areas with healthy air quality that have attained the standard. |

Performance Measures	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	
	Actuals	Actuals	Actuals	Actuals	Pres. Bud. 53	Pres. Bud. 53	
Cumulative Percent Increase in the Number of People who Live in Areas with Ambient CO, SO2, NO2, or Pb Concentrations Below the Level of the NAAQS as Compared to 1992							Percent
Cumulative Percent Increase in the Number of Areas with Ambient CO, SO2, NO2, or Pb Concentrations Below the Level of the NAAQS as Compared to 1992					87	77	Percent
Total Number of People Living in Areas Designated in Attainment with Clean Air Standards for CO, SO2, NO2, and Pb	150,523,186	150,914,043	167,425,596	167,860,905	174,000,000	174,222,000	People
Areas Designated to Attainment for the CO, SO2, NO2, and Pb Standards	10	9	12	5	19	8	Areas
Additional People Living in Newly Designated Areas with Demonstrated Attainment of the CO, SO2, NO2, and Pb Standards	4,503,306	418,000	16,483,800	435,309	6,150,000	209,991	People

Performance Measures	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	
	Actuals	Actuals	Actuals	Actuals	Pres. Bud.	Pres. Bud.	
CO Reduced from Mobile Sources	10,341,000	10,672,000	11,002,000		12,636,000	-841,971	Tons
Total Number of People Living in Areas with Demonstrated Attainment of the NO2 Standard	13,000,000	14,944,000	14,944,000		n/a	n/a	People

Baseline: The 1992 baseline for population is the population in areas not classified or designated as attainment for the clean air national ambient air quality standards. The 1992 baseline for areas is those areas that are designated as non-attainment of the NAAQs. Through FY 2003, 167,860,905 people are living in areas designated to attainment; 108 areas are designated to attainment for this/these pollutants. The 1995 baseline for mobile source emissions for CO was 70,947,000 tons. For mobile sources, the 2000 MOBILE 6 inventory is used as the baseline for FY 2005; the 2000 baseline for CO emissions is 79 million tons. While on-road CO emissions continue to decrease, there is an overall increase in mobile source CO emissions due to a growth in nonroad CO. Beginning in FY 2004, EPA changed the basis for evaluating progress for this measure to reflect actual measured levels of air quality. Previously, EPA had not defined an area as having clean air until the area was formally classified as having met health-based standards. The procedural requirements for classification may require a year or more to complete. The previous total population numbers were for 2000 – 27.7million (m) 2001 – 36.3m; 2002 – 36.7m; 2003 – 53.7m.

Reduce Exposure to Unhealthy Ozone Levels - 8 Hour

In 2005 The number of people living in areas with monitored ambient ozone concentrations below the NAAQS for the 8-hour ozone standard will increase by 4% (relative to 2004) for a cumulative total of 7% (relative to 2001).

In 2004 The number of people living in areas with monitored ambient ozone concentrations below the NAAQS for the 8-hour standard will increase by 3% (relative to 2003) for a cumulative total of 3% (relative to 2001).

Performance Measures	FY 2000 Actuals	FY 2001 Actuals	FY 2002 Actuals	FY 2003 Actuals	FY 2004 Pres. Bud.	FY 2005 Pres. Bud.	
Cumulative Percent Increase in the Number of People who Live in Areas with Ambient 8-hour Concentrations Below the Level of the NAAQS as Compared to 2001					<1	<1	Percent
Cumulative Percent Increase in the Number of Areas with Ambient 8-hour Ozone Concentrations Below the Level of the NAAQS as Compared to 2001					<1	<1	Percent

Baseline: EPA will designate the attainment status for areas in April 2004. With that data, we will have the population baseline as well as the number of areas that are not in attainment for the 8-hour ozone standard.

Reduce Exposure to Unhealthy PM Levels - PM- 2.5

In 2005 The number of people living in areas with monitored ambient PM concentrations below the NAAQS for the PM-2.5 standard will increase by 1% (relative to 2003) for a cumulative total of less than 1% (relative to 2001).

In 2004 The number of people living in areas with monitored ambient ozone concentrations below the NAAQS for the PM-2.5 standard will increase by 1% (relative to 2003) for a cumulative total of less than 1% (relative to 2001).

Performance Measures	FY 2000 Actuals	FY 2001 Actuals	FY 2002 Actuals	FY 2003 Actuals	FY 2004 Pres. Bud.	FY 2005 Pres. Bud.	
Cumulative Percent Increase in the Number of People who Live in Areas with Ambient PM-2.5 Concentrations Below the Level of the NAAQS as Compared to 2001					1	1	Percent
Percent Increase in the Number of Areas with Ambient PM-2.5 Concentrations Below the Level of the NAAQS as Compared to 2001					1	1	Percent

Baseline: EPA will designate the attainment status for areas in FY 2005. With that data, we will have the population baseline as well as the number of areas that are not in attainment for the PM-2.5 standard.

Increase Tribal Air Capacity

In 2004 Increase the number of tribes monitoring air quality for ozone and/or particulate matter from 42 to 45 and increase the percentage of tribes monitoring clean air for ozone from 64% to 67% and particulate matter from 71% to 72%.

In 2003 39 tribes monitored air quality for ozone and/or particulate matter; 66% of tribes monitored clean air for ozone and 68% monitored for particulate matter.

Performance Measures	FY 2000 Actuals	FY 2001 Actuals	FY 2002 Actuals	FY 2003 Actuals	FY 2004 Pres. Bud.	FY 2005 Pres. Bud.	
Percent of Tribes with Tribal Lands Monitoring for Ozone and/or Particulate Matter					13		Percent
Percent of Monitoring Tribes Monitoring Clean Air for Ozone				66	67		Percent
Percent of Monitoring Tribes Monitoring Clean Air for Particulate Matter				68	72		Percent
Number of Tribes Implementing Air Programs				39 tribes	30		Tribes

Baseline: There are 570 Federally-recognized Tribes with 341 Tribes having Tribal lands (Alaska Native Villages (Tribes) number 229 entities but only one 'reservation'). During 2003, 39 Tribes conducted monitoring for ozone and/or particulate matter; fifteen Tribes monitored their air sheds for ozone (10 of which recorded clean air) and thirty seven Tribes monitored for particulate matter (25 of which recorded clean air). EPA will continue to work with the Tribes to increase the number and/or percentage of Tribes that monitor for clean air.

Acid Rain

In 2005 Reduce total annual average nitrogen deposition and ambient nitrate concentrations 5% from baseline.

In 2005 Reduce total annual average sulfur deposition and ambient sulfate concentrations 27% from baseline

In 2004 Reduce total annual average nitrogen deposition and mean ambient nitrate concentrations 5% from baseline

In 2004 Reduce total annual average sulfur deposition and mean ambient sulfate concentrations 25% from baseline.

Performance Measures	FY 2000 Actuals	FY 2001 Actuals	FY 2002 Actuals	FY 2003 Actuals	FY 2004 Pres. Bud.	FY 2005 Pres. Bud.
Total Annual Average Sulfur Deposition and Ambient Sulfate concentrations reduced (per cent from baseline)					25	27
Total Annual Average Nitrogen Deposition and Ambient Nitrate concentrations reduced (per cent from baseline)					5	5

Baseline: Sulfur and nitrogen deposition contribute to acidification of lakes and streams, making them unable to support fish and other aquatic life. Reductions in both total sulfur and nitrogen deposition is critical to reducing the number of chronically acidic water bodies. Ambient sulfate and ambient nitrate (“acid rain particulate”) contributes to unhealthy air and respiratory problems in humans, especially children and other sensitive populations. The baseline is established from monitored site levels based on consolidated map of 1989-1991 showing three years of deposition levels produced from the CASTNet site (<http://www.epa.gov/airmarkets/castnet/sites.html>).

OBJECTIVE: HEALTHIER INDOOR AIR

By 2008, 22.6 million more Americans than in 1994 will be experiencing healthier indoor air in homes, schools, and office buildings.

Healthier Residential Indoor Air

- In 2005 843,300 additional people will be living in homes with healthier indoor air.
- In 2004 834,400 additional people will be living in healthier residential indoor environments.
- In 2003 End-of-year FY 2003 data will be available in late 2004 to verify that 834,400 additional people were living in healthier residential indoor environments.
- In 2002 834,400 additional people lived in healthier residential indoor environments.
- In 2001 An additional 890,000 additional people lived in healthier residential indoor environments.
- In 2000 1,032,000 additional people lived in healthier residential indoor environments.

Performance Measures	FY 2000 Actuals	FY 2001 Actuals	FY 2002 Actuals	FY 2003 Actuals	FY 2004 Pres. Bud.	FY 2005 Pres. Bud.
People Living in Healthier Indoor Air	1,032,000	890,000	834,400	Data Lag	834,400	843,300

Baseline: 1. By 2005, increase the number of people living in homes built with radon reducing features to 4,539,000 from 1,862,280 in 1994 (cumulative).* 2. By 2005, decrease the number of children exposed to ETS from 27,502,000 in 1994 to 24,119,404 (cumulative).** 3. By 2005, increase by 500,000 the number of people with asthma and their caregivers who are educated about indoor air asthma triggers.

* The 1994 baseline for the number of new homes built with radon-resistant design features has changed from 684,000 to 384,000. This is due to a recent review of historical NAHB Research Center reports which determined that a significant number of "rough-in" installations were reported as radon-resistant new construction. "Rough-in" installations are not complete radon-reduction systems and do not provide any risk reduction, and they should not be considered when estimating the number of homes built with radon-resistant new construction. In order to improve the integrity of the results that are being reported, EPA is dropping homes with rough-in installations when estimating the amount of homes built with radon-resistant construction. The baseline of existing homes mitigated remains the same at 300,000 in 1994.

** The 1995 Census Report that EPA was using for a baseline population (19,500,000) for children 0 to 6 years of age represented only children 0 to 4 years of age. This recently came to our attention after an internal review of the baselines. The actual baseline population of children from the ages of 0 to 6 should be 27,502,168. In order to improve the integrity of the results that are being reported, EPA is correcting the baseline population to the comprehensive number which includes the ages 0 to 6 years old. Our 2005 goal of decreasing the percentage of children exposed, remains at 15% and the starting point remains at 27.3%.

Healthier Indoor Air in Schools

- In 2005 1,312,500 students, faculty and staff will experience improved indoor air quality in their schools.
- In 2004 1,575,000 students, faculty and staff will experience improved indoor air quality in their schools.
- In 2003 End-of-year FY 2003 data will be available in late 2004 to verify that 1,050,000 students, faculty and staff experienced improved indoor air quality in their schools.
- In 2002 1,228,500 students, faculty and staff experienced improved indoor air quality in their schools.
- In 2001 An additional 1,930,000 students, faculty and staff experienced improved indoor air quality in their schools.
- In 2000 2,580,000 students, faculty and staff experienced improved indoor air quality in their schools.

Performance Measures	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	
	Actuals	Actuals	Actuals	Actuals	Pres. Bud.	Pres. Bud.	
Students/Staff Experiencing Improved IAQ in Schools	2,580,000	1,930,000	1,228,500	Data Lag	1,575,000	1,312,500	Students/Staff

Baseline: The nation has approximately 117,000* schools with an average of 525 students, faculty and staff occupying them for a total baseline population of 61,425,000. The IAQ "Tools for Schools" Guidance implementation began in 1997. For FY 2004, the program projects an additional 3,000 schools will implement the guidance and seeks to obtain implementation

commitments from 15 of the 100 largest school districts in the U.S. with an average of 140,000 per district. (Additional, not cumulative since there is not an established baseline for good IAQ practices in schools.)

*According to the U.S. Department of Education National Center for Education Statistics, between 1994 and 2002, 7,000 new schools were built. For the revised strategic plan we increased our baseline to incorporate the increase. Our FY 2008 strategic goal incorporates the additional school.

Healthier Indoor Air in Workplaces

In 2005 150,000 additional office workers will experience improved air quality in their workplaces.

Performance Measures	FY 2000 Actuals	FY 2001 Actuals	FY 2002 Actuals	FY 2003 Actuals	FY 2004 Pres. Bud.	FY 2005 Pres. Bud.	
150,000 additional office workers will experience improved air quality in their workplaces.						150,000	People

Baseline: There are approximately 750,000 office buildings with 12 billion square feet. The mean worker density is 1 office worker per 500 square feet. Therefore, a total of 24 million office workers work in office buildings. Our 2005 goal is to get 5% of all office buildings to adopt good IAQ measures which translates into 1.2 million office workers (cumulative from 1994). Our 2008 goal is to get an additional 3% of all office buildings to adopt good IAQ measures which translates to 720,000 office workers (cumulative at 240,000 per year).

OBJECTIVE: REDUCE GREENHOUSE GAS INTENSITY

Through EPA's voluntary climate protection programs, contribute 45 million metric tons of carbon equivalent (MMTCE) annually to the President's 18 percent greenhouse gas intensity improvement goal by 2012. (An additional 75 MMTCE to result from the sustained growth in the climate programs are reflected in the Administration's business-as-usual projection for greenhouse gas intensity improvement.)

Reduce Greenhouse Gas Emissions

In 2005 Greenhouse gas emissions will be reduced from projected levels by approximately 90 MMTCE per year through EPA partnerships with businesses, schools, state and local governments, and other organizations.

In 2004 Greenhouse gas emissions will be reduced from projected levels by approximately 81 MMTCE per year through EPA partnerships with businesses, schools, state and local governments, and other organizations.

In 2003 End of year FY 2003 data will be available in mid-2004 to verify that Greenhouse gas emissions will be reduced from projected levels by approximately 72.2 MMTCE per year through EPA partnerships with businesses, schools, state and local governments, and other organizations.

In 2002 Greenhouse gas emissions were reduced from projected levels by 71.0 MMTCE per year through EPA partnerships with businesses, schools, state and local governments, and other organizations.

In 2001 EPA's Climate Protection Programs reduced greenhouse gas emissions by 65 million metric tons of carbon equivalent in 2001. EPA estimates that due to investments already made through EPA's technology deployment programs, greenhouse gas emissions will be reduced by more than 500 MMTCE through 2012.

In 2000 Greenhouse gas emissions were reduced from projected levels by more than 59.3 MMTCE per year through EPA partnerships with businesses, schools, State and local governments, and other organizations thereby offsetting growth in GHG emissions above 1990 level by about 20%.

Performance Measures	FY 2000 Actuals	FY 2001 Actuals	FY 2002 Actuals	FY 2003 Actuals	FY 2004 Pres. Bud.	FY 2005 Pres. Bud.	
Annual Greenhouse Gas Reductions – All EPA Programs	59.3	65	71	Data Lag	81.0	90.2	MMTCE
Greenhouse Gas Reductions from EPA's Buildings Sector Programs (ENERGY STAR)	15.2	16.6	18	Data Lag	21.4	23.8	MMTCE
Greenhouse Gas Reductions from EPA's Industrial Efficiency/Waste Management Programs	5.5	5.8	6.7	Data Lag	7.3	8	MMTCE
Greenhouse Gas Reductions from EPA's Industrial Methane Outreach Programs	13.8	16	17.0	Data Lag	18.1	19.1	MMTCE
Greenhouse Gas Reductions from EPA's Industrial HFC/PFC Programs	21.4	22.8	24.9	Data Lag	29.6	34.4	MMTCE
Greenhouse Gas Reductions from EPA's Transportation Programs	1.7	1.9	2.4	Data Lag	2.6	2.9	MMTCE
Greenhouse Gas Reductions from EPA's State and Local Programs	1.7	1.9	2.0	Data Lag	2.0	2.0	MMTCE

Baseline: The baseline for evaluating program performance is a projection of U.S. greenhouse gas emissions in the absence of the U.S. climate change programs. The baseline was developed as part of an interagency evaluation of the U.S. climate change programs in 2002, which built on similar baseline forecasts developed in 1997 and 1993. Baseline data for carbon emissions related to energy use is based on data from the Energy Information Agency (EIA) and from EPA's Integrated Planning Model of the U.S. electric power sector. Baseline data for non-carbon dioxide (CO₂) emissions, including nitrous oxide and other high global warming potential gases are maintained by EPA. Baseline information is discussed at length in the U.S. Climate Action Report 2002 (www.epa.gov/globalwarming/publications/car/index.html), which provides a discussion of differences in assumptions between the 1997 baseline and the 2002 update, including which portion of energy efficiency programs are included in the estimates. EPA develops the non-CO₂ emissions baselines and projections using information from partners and other sources. EPA continues to develop annual inventories as well as update methodologies as new information becomes available.

Reduce Energy Consumption

- In 2005 Reduce energy consumption from projected levels by more than 120 billion kilowatt hours, contributing to over \$8.5 billion in energy savings to consumers and businesses.
- In 2004 Reduce energy consumption from projected levels by more than 110 billion kilowatt hours, contributing to over \$7.5 billion in energy savings to consumers and businesses.
- In 2003 End of year FY 2003 data will be available in late 2004 to verify the reduction in energy consumption from projected levels by more than 95 billion kilowatt hours, contributing to over \$6.5 billion in energy savings to consumers and businesses.
- In 2002 Reduced energy consumption by 100 billion kilowatt hours, contributing to over \$10 billion in energy savings to consumers and businesses.
- In 2001 EPA's Climate Protection Programs reduced energy use by 84 billion kilowatt hours in 2001.
- In 2000 Reduced energy consumption from projected levels by about 74 billion kilowatt hours, resulting in over \$8 billion in energy savings to consumers and businesses that participate in EPA's climate change programs.

Performance Measures	FY 2000 Actuals	FY 2001 Actuals	FY 2002 Actuals	FY 2003 Actuals	FY 2004 Pres. Bud.	FY 2005 Pres. Bud.	
Annual Energy Savings - All EPA Programs	74	84	100	Data Lag	110	120	Billion kWh

Baseline: The baseline for evaluating program performance is a projection of U.S. greenhouse gas emissions in the absence of the U.S. climate change programs. The baseline was developed as part of an interagency evaluation of the U.S. climate change programs in 2002, which built on similar baseline forecasts developed in 1997 and 1993. Baseline data for carbon emissions related to energy use is based on data from the Energy Information Agency (EIA) and from EPA's Integrated Planning Model of the U.S. electric power sector. Baseline data for non-carbon dioxide (CO2) emissions, including nitrous oxide and other high global warming potential gases are maintained by EPA. Baseline information is discussed at length in the U.S. Climate Action Report 2002 (www.epa.gov/globalwarming/publications/car/index.html), which provides a discussion of differences in assumptions between the 1997 baseline and the 2002 update, including which portion of energy efficiency programs are included in the estimates. EPA develops the non-CO2 emissions baselines and projections using information from partners and other sources. EPA continues to develop annual inventories as well as update methodologies as new information becomes available.

OBJECTIVE: PROTECT THE OZONE LAYER

By 2010, through worldwide action, ozone concentrations in the stratosphere will have stopped declining and slowly begun the process of recovery, and the risk to human health from overexposure to ultraviolet (UV) radiation, particularly among susceptible subpopulations, such as children, will be reduced.

Restrict Domestic Consumption of Class II HCFCs

- In 2005 Restrict domestic annual consumption of class II HCFCs below 9,906 ODP-weighted metric tonnes (ODP MTs) and restrict domestic exempted production and import of newly produced class I CFCs and halons below 10,000 ODP MTs.

- In 2004 Restrict domestic annual consumption of class II HCFCs below 9,906 ODP-weighted metric tonnes (ODP MTs) and restrict domestic exempted production and import of newly produced class I CFCs and halons below 10,000 ODP MTs.
- In 2003 End of year FY 2003 data will be available in late 2004 to verify restriction of domestic consumption of class II HCFCs below 9,906 ODP-weighted metric tonnes (ODP MTs) and restriction of domestic exempted production and import of newly produced class I CFCs and halons below 10,000 ODP MTs.
- In 2002 End of year FY 2002 data will be available in late 2004 to verify restriction of domestic consumption of class II HCFCs below 15,240 ODP-weighted metric tonnes (ODP MTs) and restrict domestic exempted production and import of newly produced class I CFCs and halons below 60,000 ODP MTs.
- In 2001 Restricted domestic consumption of class II HCFCs below 15,240 ODP-weighted metric tonnes (ODP MTs) and restricted domestic exempted production and import of newly produced class I CFCs and halons below 60,000 ODP MTs.
- In 2000 Domestic consumption of class II HCFCs was restricted below 15,240 ODP-weighted metric tonnes (ODP MTs) and domestic exempted production and import of newly produced class I CFCs and halons was restricted below 60,000 ODP MTs.

Performance Measures	FY 2000 Actuals	FY 2001 Actuals	FY 2002 Actuals	FY 2003 Actuals	FY 2004 Pres. Bud.	FY 2005 Pres. Bud.	
Domestic Consumption of Class II HCFCs	13,180	12,087	Data Lag	Data Lag	<9,906	<9,906	ODP MTs
Domestic Exempted Production and Import of Newly Produced Class I CFCs and Halons	462	3,062	Data Lag	Data Lag	<10,000	<10,000	ODP MTs

Baseline: The base of comparison for assessing progress on the 2005 annual performance goal is the domestic consumption cap of class II HCFCs as set by the Parties to the Montreal Protocol. Each Ozone Depleting Substance (ODS) is weighted based on the damage it does to the stratospheric ozone - this is its ozone-depletion potential (ODP). Beginning on January 1, 1996, the cap was set at the sum of 2.8 percent of the domestic ODP-weighted consumption of CFCs in 1989 plus the ODP-weighted level of HCFCs in 1989. Consumption equals production plus import minus export.

OBJECTIVE: RADIATION

Through 2008, working with partners, minimize unnecessary releases of radiation and be prepared to minimize impacts to human health and the environment should unwanted releases occur.

Ensure WIPP Safety

- In 2005 Certify that 40,000 55-gallon drums of radioactive waste (containing approximately 120,000 curies) shipped by DOE to the Waste Isolation Pilot Plant are permanently disposed of safely and according to EPA standards.

- In 2004 Certify that 36,000 55-gallon drums of radioactive waste (containing approximately 108,000 curies) shipped by DOE to the Waste Isolation Pilot Plant are permanently disposed of safely and according to EPA standards.
- In 2003 36,041 drums (55 gallon) of radioactive waste shipped by DOE to the Waste Isolation Pilot Plant were permanently disposed of safely and according to EPA standards.
- In 2002 EPA certified that 22,800 55 gallon drums of radioactive waste (containing approximately 68,400 curies) shipped by DOE to the Waste Isolation Pilot Plant were permanently disposed of safely and according to EPA standards.

Performance Measures	FY 2000 Actuals	FY 2001 Actuals	FY 2002 Actuals	FY 2003 Actuals	FY 2004 Pres. Bud.	FY 2005 Pres. Bud.	
Number of 55-Gallon Drums of Radioactive Waste Disposed of According to EPA Standards			22,800	36,041	36,000	40,000	Drums

Baseline: The Waste Isolation Pilot Plant (WIPP) near Carlsbad, NM was opened in May 1999 to accept radioactive transuranic waste. By the end of FY 2003, approximately 73,000 (cumulative) 55 gallon drums will be safely disposed. In FY 2005, EPA expects that DOE will ship an additional 40,000 55- gallon drums of waste. Through FY 2004, EPA expects that DOE will have shipped safely and according to EPA standards, approximately 13% of the planned waste volume, based on disposal of 860,000 drums over the next 40 years. Number of drums shipped to the WIPP facility on an annual basis is dependent on DOE priorities and funding. EPA volume estimates are based on projecting the average shipment volumes over 40 years with an initial start up.

Build National Radiation Monitoring System

- In 2005 EPA will purchase 60 additional state of the art monitoring units and initiate deployment to sites selected based on population and geographical coverage. All old sampling will be replaced and population coverage will be expanded to 60%.
- In 2004 EPA will purchase 60 state of the art radiation monitoring units thereby increasing EPA radiation monitoring capacity and population coverage from 37% of the contiguous U.S. population in FY 2002 to 50% in FY 2004.

Performance Measures	FY 2000 Actuals	FY 2001 Actuals	FY 2002 Actuals	FY 2003 Actuals	FY 2004 Pres. Bud.	FY 2005 Pres. Bud.	
Purchase and Deploy State-of-the Art Monitoring Units					60	60	Units Purchased

Baseline: The current fixed monitoring system, part of the Environmental Radiation Ambient Monitoring System, was developed in the 1960s for the purpose of monitoring radioactive fallout from nuclear weapons testing. The system currently consists of 52 old, low-tech air particulate samplers which provide coverage in cities which represent approximately 24% of the population. By 2005, EPA will upgrade the old system by purchasing 120 state-of-the-art units which will be strategically located to cover approximately 60% of the population. The

current system's air samplers will be retired from service due to age, although some may be retained for emergency use.

Homeland Security - Readiness & Response

In 2005 Verify that 50 percent of EPA's Radiological Emergency Response Team (RERT) members meet scenario-based response criteria.

Performance Measures	FY 2000 Actuals	FY 2001 Actuals	FY 2002 Actuals	FY 2003 Actuals	FY 2004 Pres. Bud.	FY 2005 Pres. Bud.	
Percentage of EPA RERT members that meet scenario-based criteria						50	Percent

Baseline: Currently, EPA assesses RERT readiness based on the ability of the RERT to: (1) provide effective field response, as defined today; (2) support coordination centers; and (3) provide analytical capabilities throughout as needed to support a single small-to-medium scale incident. These evaluation criteria will be reevaluated and revised in response to the Department of Homeland Security development of criteria for the Nuclear Incident Response Team established under the Homeland Security Act of 2002, which includes EPA RERT assets.

OBJECTIVE: ENHANCE SCIENCE AND RESEARCH

Through 2010, provide and apply sound science to support EPA's goal of clean air by conducting leading-edge research and developing a better understanding and characterization of environmental outcomes under Goal 1.

Clean Automotive Technology

In 2005 Transfer hybrid powertrain components, originally developed for passenger car applications, to meet size, performance, durability, and towing requirements of Sport Utility Vehicle and urban delivery vehicle applications with an average fuel economy improvement of 30% over the baseline.

In 2004 Transfer hybrid powertrain components, originally developed for passenger car applications, to meet size, performance, durability, and towing requirements of Sport Utility Vehicle and urban delivery vehicle applications with an average fuel economy improvement of 25% over the baseline.

Performance Measures	FY 2000 Actuals	FY 2001 Actuals	FY 2002 Actuals	FY 2003 Actuals	FY 2004 Pres. Bud.	FY 2005 Pres. Bud.	
Fuel Economy of EPA-Developed SUV Hybrid Vehicle over EPA Driving Cycles Tested					25.2	26.3	MPG

Baseline: The average fuel economy of all SUVs sold in the US in 2001 is 20.2 mpg. Values for 2002, 2003, and 2004 represent 15%, 20%, and 25% improvements over this baseline, respectively. The long-term target is to demonstrate a practical and affordable powertrain that is 30% more efficient by 2005, and 100% more efficient by 2010.

Research

PM Measurement Research

In 2005 By FY 2005, deliver and transfer improved receptor models and data on chemical compounds emitted from sources so that, by 2006, EPA's Office of Air and Radiation and the states have the necessary new data and tools to predict, measure, and reduce ambient PM and PM emissions to attain the existing PM National Ambient Air Quality Standards (NAAQS) for the protection of public health.

Performance Measures	FY 2000 Actuals	FY 2001 Actuals	FY 2002 Actuals	FY 2003 Actuals	FY 2004 Pres. Bud.	FY 2005 Pres. Bud.	
Improved receptor models and data on chemical compounds emitted from sources						09/30/05	models/data

Baseline: Following designation of non-attainment areas for the Particulate Matter National Ambient Air Quality Standards in 2004 and 2005, states will need to immediately begin developing State Implementation Plans (SIPs). SIPs incorporate source emission reduction rules that once implemented lead to cleaner air and standards attainment. They are due to EPA three years after designation. SIP development is predicated on the availability of recent and credible information on source emission characteristics and receptor-oriented models that can identify sources contributing to locally observed PM concentrations based on their chemical signatures. A next update (FY 2005) of these constantly improving models and the latest in source signatures will be produced to help states with their SIPs as part of a weight of evidence approach that use these and chemical transport modeling to tag specific sources with reduction targets.

Beginning in FY 2005, regular evaluations by independent and external panels will provide reviews of EPA research programs' relevance, quality, and successful performance to date, in accordance with OMB's Investment Criteria for Research and Development. These evaluations will include an examination of a program's design to determine the appropriateness of a program's short-, intermediate-, and long-term goals and its strategy for attaining these. Reviewers will also qualitatively determine whether EPA has been successful in meeting its annual and long-term commitments for research. Recommendations and results from these reviews will improve the design and management of EPA research programs and help to measure their progress under the Government Performance and Results Act (GPRA).

GOAL: CLEAN AND SAFE WATER

Ensure drinking water is safe. Restore and maintain oceans, watersheds, and their aquatic ecosystems to protect human health, support economic and recreational activities, and provide healthy habitat for fish, plants, and wildlife.

OBJECTIVE: PROTECT HUMAN HEALTH

Protect human health by reducing exposure to contaminants in drinking water (including protecting source waters), in fish and shellfish, and in recreational waters.

Safe Drinking Water

- | | |
|---------|--|
| In 2005 | 75% of community water systems will provide drinking water that meets health-based standards with a compliance date of January 2002 or later. |
| In 2005 | 75% of the population served by community water systems will receive drinking water that meets health-based standards with a compliance date of January 2002 or later. |
| In 2005 | 90% of the population served by community water systems in Indian country will receive drinking water that meets all applicable health-based drinking water standards. |
| In 2005 | 93% of the population served by community water systems will receive drinking water that meets all applicable health-based drinking water standards through effective treatment and source water protection. |
| In 2005 | 94% of the population served by community water systems will receive drinking water that meets health-based standards with which systems need to comply as of December 2001. |
| In 2005 | 94% of community water systems will provide drinking water that meets health-based standards with which systems need to comply as of December 2001. |
| In 2004 | 85 percent of the population served by community water systems will receive drinking water meeting health-based standards promulgated in or after 1998. |
| In 2004 | 92% of the population served by community water systems will receive drinking water meeting all health-based standards in effect as of 1994, up from 83% in 1994. |
| In 2003 | End of year FY 2003 data will be available in 2004 to verify 85 percent of the population served by community water systems received drinking water meeting health-based standards promulgated in or after 1998. |
| In 2003 | End of year FY 2003 data will be available in 2004 to verify 92% of the population served by community water systems received drinking water meeting all health-based standards in effect as of 1994, up from 83% in 1994. |
| In 2002 | 91% of the population served by community water systems received drinking water meeting all health-based standards in effect as of 1994. |
| In 2002 | Final FY 02 numbers were not available until June 2003. |
| In 2001 | 91 percent of the population served by water systems received drinking water meeting all health-based standards that were in effect as of 1994. |
| In 2000 | 91% of the population served by community drinking water systems received drinking water meeting all health-based standards that were in effect as of 1994, up from 83% in 1994. |

Performance Measures	FY 2000 Actuals	FY 2001 Actuals	FY 2002 Actuals	FY 2003 Actuals	FY 2004 Pres. Bud.	FY 2005 Pres. Bud.	
Percent of population served by community drinking water systems with no violations during the year of any Federally enforceable health-based standards that were in place by 1994.	91	91	91	91	92		% Population
Population served by community water systems providing drinking water meeting health-based standards promulgated in or after 1998.			N/A	96%	85		% Population
Population served by community water systems that receive drinking water that meets health-based standards with which systems need to comply as of December 2001						94	% Population
Population served by community water systems that receive drinking water that meets health-based standards with a compliance date of January 2002 or later						75	% Population
Percentage of community water systems that provide drinking water that meets health-based standards with which systems need to comply as of December 2001						94	% CWSs
Percentage of community water systems that provide drinking water that meets health-based standards with a compliance date of January 2002 or later						75	% CWSs
Percent of the population served by community water systems in Indian country that receive drinking water that meets all applicable health-based drinking water standards						90	% Population
% of population served by community water systems that receive drinking water that meets all applicable health-based drinking water standards through effective treatment and source water protection						93	% population

Baseline: In 1998, 85% of the population that was served by community water systems and 96% of the population served by non-community, non-transient drinking water systems received drinking water for which no violations of Federally enforceable health standards had occurred during the year. Year-to-year performance is expected to change as new standards take effect. Covered standards include: Stage 1 disinfection by-products/interim enhanced surface water treatment rule/long-term enhanced surface water treatment rule/arsenic.

Source Water Protection

- In 2005 20% of source water areas for community water systems will achieve minimized risk to public health.
- In 2004 Advance States' efforts with community water systems to protect their surface and ground water resources that are sources of drinking water supplies.
- In 2003 End of year FY 2003 data will be available in 2004 to verify 39,000 community water systems (75% of the nation's service population) will have completed source water assessments and 2,600 of these (10% of the nation's service population) will be implementing source water protection programs.

Performance Measures	FY 2000 Actuals	FY 2001 Actuals	FY 2002 Actuals	FY 2003 Actuals	FY 2004 Pres. Bud.	FY 2005 Pres. Bud.	
Number of community water systems and percent of population served by those CWSs that are implementing source water protection programs.				6,570/ 25%	25%/ 7,500		% pop/systems
Percent of source water areas for community water systems that achieve minimized risk to public health						20	% Areas

Baseline: EPA defines "achieve minimized risk" as substantial implementation of source water protection actions, as determined by a State's source water protection strategy. Approximately 268 million people are estimated to be served by Community Water Systems (CWSs) in 2002.

River/Lake Assessments for Fish Consumption

- In 2005 80% of the shellfish growing acres monitored by states are approved or conditionally approved for use.
- In 2005 At least 1% of the water miles/acres identified by states or tribes as having a fish consumption advisory in 2002 will have improved water and sediment quality so that increased consumption of fish and shellfish is allowed.
- In 2004 Reduce consumption of contaminated fish by increasing the information available to States, Tribes, local governments, citizens, and decision-makers.
- In 2003 Reduced consumption of contaminated fish by increasing the information available to States, Tribes, local governments, citizens, and decision-makers.
- In 2002 14% of the nation's river miles and 28% of nation's lake acres have been assessed to determine if they contain fish and shellfish that should not be eaten or should be eaten in only limited quantities.
- In 2001 9% of the nation's river miles and 23% of nation's lake acres have been assessed to determine if they contain fish and shellfish that should not be eaten or should be eaten in only limited quantities.

In 2000 7% of the nation's river miles and 16% of the nation's lake acres have been assessed to determine if they contain fish and shellfish that should not be eaten or should be eaten in only limited quantities.

Performance Measures	FY 2000 Actuals	FY 2001 Actuals	FY 2002 Actuals	FY 2003 Actuals	FY 2004 Pres. Bud.	FY 2005 Pres. Bud.	
Lake acres assessed for the need for fish advisories and compilation of state-issued fish consumption advisory methodologies. (cumulative)	16	23	28	33	35		% Lake acres
River miles assessed for the need for fish consumption advisories & compilation of state-issued fish consumption advisory methodologies. (cumulative)	7	9	14 %	15	16%		% River miles
Percent of water miles/acres, identified by states or tribes as having fish consumption advisories in 2002, where increased consumption of fish is allowed.						1	% Miles/Acres
Percent of the shellfish growing acres monitored by states that are approved or conditionally approved for use						80	% Areas

Baseline: In 1999, 7% of the Nation's rivers and 15% of the Nation's lakes were assessed to determine if they contained fish that should not be eaten or should be eaten in only limited quantities. In September 1999, 25 states/tribes are monitoring and conducting assessments based on the national guidance to establish nationally consistent fish advisories. In the 2000 Report to Congress on the National Water Quality Inventory, 69% of assessed river and stream miles; 63% of assessed lake, reservoir, and pond acres; and 53% of assessed estuarie square miles supported their designated use for fish consumption. For shell fish consumption, 77% of assessed estuary square miles met this designated use.

Increase Information on Beaches

- In 2005 Coastal and Great Lakes beaches monitored by State beach safety programs will be open and safe for swimming in over 94% of the days of the beach season.
- In 2005 Restore water quality to allow swimming in not less than 2% of the stream miles and lake acres identified by states in 2000 as having water quality unsafe for swimming.
- In 2004 Reduce human exposure to contaminated recreation waters by increasing the information available to the public and decision-makers.
- In 2003 Reduced human exposure to contaminated recreation waters by increasing the information available to the public and decision-makers.
- In 2002 Reduced exposure to contaminated recreation waters by providing monitoring and closure data on 2,455 beaches to the public and decision-makers.

- In 2001 Reduce exposure to contaminated recreation waters by providing information on 2,354 beaches for which monitoring and closure data is available to the public and decision-makers.
- In 2000 1,981 beaches had monitoring and closure data including 150 digitized maps, available to the public through EPA's website.

Performance Measures	FY 2000 Actuals	FY 2001 Actuals	FY 2002 Actuals	FY 2003 Actuals	FY 2004 Pres. Bud.	FY 2005 Pres. Bud.	
Beaches for which monitoring and closure data is available to the public at http://www.epa.gov/waterscience/beaches/ . (cumulative)	1,981	2,354	2,445	2,823	2,823		Beaches
Restore water quality to allow swimming in stream miles and lake acres identified by states						2	% Miles/Acres
Days (of beach season) that coastal and Great Lakes beaches monitored by State beach safety programs are open and safe for swimming.						94	% Days/Season

Baseline: By the end of FY 1999, 33 states had responded to EPA's first annual survey on state and local beach monitoring and closure practices and EPA made available to the public via the internet. An average of 9 recreational contact waterborne disease outbreaks reported per year by the Centers for Disease Control for the years 1994-1998, based on data housed in EPA/ORD internal database. In 2002, monitored beaches were opened 94% of the days during the beach season.

OBJECTIVE: PROTECT WATER QUALITY

Protect the quality of rivers, lakes, and streams on a watershed basis and protect coastal and ocean waters.

Watershed Protection

- In 2005 500 of the Nation's watersheds have water quality standards met in at least 80% of the assessed water segments.
- In 2005 Water quality standards are fully attained in over 25% of miles/acres of waters by 2012, with an interim milestone of restoring 2% of these waters - identified in 2000 as not attaining standards - by 2005.
- In 2004 By FY 2005, Water quality will improve on a watershed basis such that 625 of the Nation's 2,262 watersheds will have greater than 80 percent of assessed waters meeting all water quality standards, up from 500 watersheds in 1998.
- In 2003 End of year FY 2003 data will be available in 2005 to verify if FY 2003, Water quality has improved on a watershed basis such that 600 of the Nation's 2,262 watersheds will have greater than 80 percent of assessed waters meeting all water quality standards, up from 500 watersheds in 1998.
- In 2002 This measure reflects states' biennial reporting under CWA 305(b), and is not intended to be reported against again until the FY2003 reporting cycle.

In 2001 Water quality improved on a watershed basis such that 510 of the Nation's 2,262 watersheds will have greater than 80 percent of assessed waters meeting all water quality standards, up from 500 watersheds in 1998.

Performance Measures	FY 2000 Actuals	FY 2001 Actuals	FY 2002 Actuals	FY 2003 Actuals	FY 2004 Pres. Bud. (FY 05)	FY 2005 Pres. Bud.	
Watersheds that have greater than 80% of assessed waters meeting all water quality standards.		510	510 (FY00)	453	500 (FY 05)	500	8-digit HUCs
Waterbodies (river miles and lake acres) identified in 2000 as not attaining Water quality standards, are fully attained.						2	% Miles/Acres

Baseline: As of 2002 state reports 453 watersheds had met the criteria that greater than 80% of assessed waters met all water quality standards. For a watershed to be counted toward this goal, at least 25% of the segments in the watershed must be assessed within the past 4 years consistent with assessment guidelines developed pursuant to section 305(b) of the Clean Water Act. In 2002, 0% of the 255,408 miles/and 6,803,419 acres of waters identified on 1998/2000 lists of impaired waters developed by States and approved by EPA under section 303(d) of the Clean Water Act.

Coastal Aquatic Conditions

In 2005 Improve ratings reported on the national "good/fair/poor" scale of the National Coastal Condition Report for: coastal wetlands loss by at least 0.1 point; contamination of sediments in coastal waters by at least 0.1 point; benthic quality by at least 0.1 point; & eutrophic condition by at least 0.1 point

In 2005 Scores for overall aquatic system health of coastal waters nationally, and in each coastal region, is improved on the "good/fair/poor" scale of the National Coastal Condition Report by at least 0.1 point

Performance Measures	FY 2000 Actuals	FY 2001 Actuals	FY 2002 Actuals	FY 2003 Actuals	FY 2004 Pres. Bud.	FY 2005 Pres. Bud.	
Score for overall aquatic system health of coastal waters nationally, and in each coastal region, is improved (cumulative).						2.5	Scale score
Maintain water clarity and dissolved oxygen in coastal waters at the national levels reported in the 2002 National Coastal Condition Report						4.3 / 4.5	Scale score
Improve ratings reported on the national "good/fair/poor" scale of the National Coastal Condition Report for coastal wetlands loss						1.5	Scale score
Improve ratings reported on the national "good/fair/poor" scale of the National Coastal Condition Report for contamination of sediments in coastal waters						1.4	Scale score
Improve ratings reported on the national "good/fair/poor" scale of the National Coastal Condition Report for benthic quality						1.5	Scale score
Improve ratings reported on the national "good/fair/poor" scale of the National Coastal Condition Report for eutrophic condition						1.8	Scale score

Baseline: National rating of "fair/poor" or 2.4 where the rating is based on a 5-point system where 1 is poor and 5 is good and is expressed as an aerially weighted mean of regional scores using the National Coastal Condition Report indicators [i.e., water clarity, dissolved oxygen, coastal wetlands loss, eutrophic conditions, sediment contamination, benthic health, and fish tissue contamination]. The 2002 National Coastal Condition Report indicated 4.3 for water clarity and 4.5 for dissolved oxygen, 1.4 for coastal wetlands loss; 1.3 for contamination of sediments in coastal waters; 1.4 for benthic quality; & 1.7 for eutrophic condition.

State/Tribal Water Quality Standards

- In 2005 In coordination with other federal partners reduce, by 11%, households on tribal lands lacking access to basic sanitation.
- In 2005 Water quality in Indian country will be improved at not less than 35 monitoring stations in tribal waters for which baseline data are available (i.e., show at least a 10% improvement for each of four key parameters: total nitrogen, total phosphorus, dissolved oxygen, and fecal coliforms.)
- In 2004 Assure that States and Tribes have effective, up-to-date water quality standards programs adopted in accordance with the Water Quality Standards regulation and the Water Quality Standards program priorities.

- In 2003 Assured that States and Tribes had effective, up-to-date water quality standards programs adopted in accordance with the Water Quality Standards regulation and the Water Quality Standards program priorities.
- In 2002 Assure that 25 States and 22 Tribes have effective, up-to-date water quality standards programs adopted in accordance with the Water Quality Standards regulation and the Water Quality Standards program priorities.
- In 2001 21 States and 19 Tribes have effective, up-to-date water quality standards programs adopted in accordance with the Water Quality Standards regulation and the Water Quality Standards program priorities.
- In 2000 35 States and 16 Tribes have effective, up-to-date water quality standards programs adopted in accordance with the Water Quality Standards regulation and the Water Quality Standards program priorities.

Performance Measures	FY 2000 Actuals	FY 2001 Actuals	FY 2002 Actuals	FY 2003 Actuals	FY 2004 Pres. Bud.	FY 2005 Pres. Bud.	
States with new or revised water quality standards that EPA has reviewed and approved or disapproved and promulgated federal replacement standards.		21	25	28	20		States
Tribes with water quality standards adopted and approved (cumulative).	16	19	22	23	33		Tribes
Number of monitoring stations (for which baseline data on 4 key parameters are available) where water quality is improved.						35	Stations
Number of households on tribal lands lacking access to basic sanitation.						11	% Households

Baseline: The performance measure of state submissions (above) thus represents a "rolling annual total" of updated standards acted upon by EPA, and so are neither cumulative nor strictly incremental. EPA must review and approve or disapprove state revisions to water quality standards within 60-90 days after receiving the state's package. In 2002, there will be four key parameters available at 900 sampling stations in Indian country. In 2002, Indian Health Service indicates that 71,000 households on Tribal lands lack access to basic sanitation.

OBJECTIVE: ENHANCE SCIENCE AND RESEARCH

Provide and apply a sound scientific foundation to EPA's goal of clean and safe water by conducting leading-edge research and developing a better understanding and characterization of the environmental outcomes under Goal 2.

Research

Scientific Rationale for Surface Water Criteria

In 2005 Provide methods for developing water quality criteria so that, by 2008, approaches and methods are available to States and Tribes for their use in developing and applying criteria for habitat alteration, nutrients, suspended and bedded sediments, pathogens and toxic chemicals that will support designated uses for aquatic ecosystems and increase the scientific basis for listing and delisting impaired water bodies under Section 303(d) of the Clean Water Act.

Performance Measures

	FY 2000 Actuals	FY 2001 Actuals	FY 2002 Actuals	FY 2003 Actuals	FY 2004 Pres. Bud.	FY 2005 Pres. Bud. 09/30/05	
Methods for developing water quality criteria based on population-level risks of multiple stressors to aquatic life and aquatic-dependent wildlife.							methods

Baseline: State, Tribal, and EPA programs that assess, maintain, and restore water quality are all dependent upon the ability to define water quality standards that, when met, are protective of the designated and desired use of streams, lakes, and estuaries. The scientific bases for such standards are water quality criteria that relate biological outcomes (e.g., fish populations, aquatic wildlife communities, threatened and endangered species) to measurable water quality parameters (e.g., nutrients, suspended and embedded sediments, chemical concentrations). Relatively recent and Congressionally-mandated studies by the National Research Council call for continued and more targeted scientific studies on water quality criteria that reflect observed environmental variations and that reflect the multiple influence of habitat alteration, regional and watershed conditions, and appropriate designated uses. Accordingly, EPA has modified its longstanding research on water quality criteria to address these issues. Scientific outputs from this research can be integrated into EPA technical guidance to the States and Tribes. Adoption and deployment of new criteria developed with the assistance of the new methods and approaches will improve the cost-effectiveness of TMDL's and related restoration efforts. Beginning in FY 2005, regular evaluations by independent and external panels will provide reviews of EPA research programs' relevance, quality, and successful performance to date, in accordance with OMB's Investment Criteria for Research and Development. Reviewers will also qualitatively determine whether EPA has been successful in meeting its annual and long-term commitments for research. Recommendations and results from these reviews will improve the design and management of EPA research programs and help to measure their progress under the Government Performance and Results Act (GPRA).

GOAL: LAND PRESERVATION AND RESTORATION

Preserve and restore the land by using innovative waste management practices and cleaning up contaminated properties to reduce risks posed by releases of harmful substances.

OBJECTIVE: PRESERVE LAND

By 2008, reduce adverse effects to land by reducing waste generation, increasing recycling, and ensuring proper management of waste and petroleum products at facilities in ways that prevent releases.

Municipal Solid Waste Source Reduction

- In 2005 Divert an additional 1% (for a cumulative total of 35% or 81 million tons) of municipal solid waste from land filling and combustion, and maintain per capita generation of RCRA municipal solid waste at 4.5 pounds per day.
- In 2004 Divert an additional 1% (for a cumulative total of 34% or 79 million tons) of municipal solid waste from land filling and combustion, and maintain per capita generation of RCRA municipal solid waste at 4.5 pounds per day.
- In 2003 End of year FY 2003 data will be available in December 2005 to verify that an additional 1% (for a cumulative total of 32% or 74 million tons) of municipal solid waste from land filling and combustion, and maintain per capita generation of RCRA municipal solid waste at 4.5 pounds per day was diverted.
- In 2002 FY 2002 data is currently not available for the diversion of municipal solid waste from land filling and combustion or maintaining per capita generation of RCRA municipal solid waste. Analysis of FY 2002 data is anticipated by December 2004.
- In 2001 29.2% or 68 million tons of municipal sold waste was diverted from land filling and combustion, and the per capita generation decreased to 4.4 pounds per day.
- In 2000 29.2% or 68 million tons of municipal solid waste was diverted from land filling and combustion, and the per capita generation decreased to 4.4 pounds per day.

Performance Measures	FY 2000 Actuals	FY 2001 Actuals	FY 2002 Actuals	FY 2003 Actuals	FY 2004 Pres. Bud.	FY 2005 Pres. Bud.	
Millions of tons of municipal solid waste diverted.	68	68	not available	Data available 12/05	79	81	million tons
Daily per capita generation of municipal solid waste.	4.5	4.4	not available	Data available 12/05	4.5	4.5	lbs. MSW

Baseline: An analysis conducted in FY 2001 shows approximately 68 million tons (29.2%) of municipal solid waste diverted and 4.4 lbs of MSW per person daily generation. While data indicate that the growth in recycling rates has slowed, the target of a 35% recycling rate is being maintained.

Waste and Petroleum Management Controls

- In 2005 Reduce releases to the environment by managing hazardous wastes and petroleum products properly.
- In 2004 Reduce releases to the environment by managing hazardous wastes and petroleum products properly.
- In 2003 For UST facilities, 72% are in operational compliance with leak detection, and 79% are in operational compliance with spill prevention requirements. An additional 4.1% of the RCRA facilities have permits or approved controls.
- In 2002 4.5% of RCRA hazardous waste management facilities received permits or other approved controls.
- In 2001 9.0% of RCRA hazardous waste management facilities received permits or other approved controls.
- In 2000 12.6% of RCRA hazardous waste management facilities received permits or other approved controls.

Performance Measures	FY 2000 Actuals	FY 2001 Actuals	FY 2002 Actuals	FY 2003 Actuals	FY 2004 Pres. Bud.	FY 2005 Pres. Bud.	
Percent increase of RCRA hazardous waste management facilities with permits or other approved controls.	12.6%	9.0%	4.5%	4.1%	2.4%	2.8%	percentage pts.
Number of confirmed UST releases nationally.					<10,000	<10,000	UST releases
Increase in UST facilities in significant operational compliance with leak detection requirements.				-8%	4%	not applicable	percentage pts.
Increase in UST facilities in significant operational compliance with spill, overfill and corrosion protection regulations.				-6%	4%	not applicable	percentage pts.
Percent increase of UST facilities in significant operational compliance with both detection and release prevention (spill overflow, corrosion protection) requirements.						1%	percent

Baseline: EPA did not increase by 3% to 80% for the leak detection requirements or with spill, overfill and corrosion protection requirements by 3% to 85% in FY 2003. The FY 2003 actuals were 72% for UST facilities in significant operational compliance with leak detection requirements; 79% for UST facilities in significant operational compliance with spill, overfill and corrosion protection. Although the Agency has been working with the states to improve their reporting of both measures, the compliance rates for both have been steady or declining. There is some variability in reporting by states because some states have more stringent requirements, while other states have targeted non-compliant UST facilities so the facilities that are inspected are

not representative of all facilities in the state. A baseline for the new combined measure will be determined in FY 2004, and is currently estimated to be approximately 60%. Between FY 1999 and FY 2003, confirmed UST releases averaged 13,600. By the end of FY 2003, 83.1% of approximately 2,750 RCRA facilities had permits or other approved controls in place.

OBJECTIVE: RESTORE LAND

By 2008, control the risks to human health and the environment by mitigating the impact of accidental or intentional releases and by cleaning up and restoring contaminated sites or properties to appropriate levels.

Prepare for and Respond to Accidental and Intentional Releases

- In 2005 Reduce and control the risks posed by accidental and intentional releases of harmful substances by improving our Nation's capability to prepare for and respond more effectively to these emergencies.
- In 2004 Reduce and control the risks posed by accidental and intentional releases of harmful substances by improving our Nation's capability to prepare for and respond more effectively to these emergencies.
- In 2003 EPA responded to or monitored 322 significant oil spills in the inland zone and Superfund accomplished 380 removal response actions.
- In 2002 EPA responded to or monitored 203 oil spills and Superfund initiated 426 removal response actions
- In 2001 EPA responded to or monitored 527 oil spills and Superfund initiated 302 removal response actions.
- In 2000 EPA responded to or monitored 368 oil spills and Superfund initiated 375 removal response actions.

Performance Measures	FY 2000 Actuals	FY 2001 Actuals	FY 2002 Actuals	FY 2003 Actuals	FY 2004 Pres. Bud.	FY 2005 Pres. Bud.	
Number of Superfund removal response actions initiated.	375	302	426	380	350	350	removals
Oil spills responded to or monitored by EPA.	368	527	203	322	300	300	spills
Percentage of emergency response and homeland security readiness improvement.				82.3%	10%	10%	percent
Number of inspections and exercises conducted at oil storage facilities that are required to have Facility Response Plans.						360	inspections/ exercises

Baseline: Through FY 2003, Superfund had initiated approximately 7,900 removal response actions. EPA typically responds to or monitors 300 oil spill cleanups per year. In FY2003, EPA completed evaluations of core emergency response capabilities in each region, and the average score from these was 823 out of a possible 1,000 points so 82.3 percent is used as the baseline for improvements. Between FY 1997 and FY 2003, approximately 31 percent (or

1,862) of the nearly 6,000 oil storage facilities required to have Facility Response Plans were inspected.

Assess and Cleanup Contaminated Land

- In 2005 Control the risks to human health and the environment at contaminated properties or sites through cleanup, stabilization, or other action, and make land available for reuse.
- In 2004 Control the risks to human health and the environment at contaminated properties or sites through cleanup, stabilization, or other action, and make land available for reuse.
- In 2003 Superfund made 917 final site assessment decisions, controlled human exposures at 28 sites and groundwater migration at 54 sites, and achieved 40 construction completions. The RCRA program controlled human exposures at 230 sites and groundwater migration at 175 sites. There were 18,518 LUST cleanups.
- In 2002 Human exposures to toxins were controlled at 172 RCRA facilities and toxic releases to groundwater were controlled at 171 RCRA facilities. Also, 15,769 leaking underground storage tank cleanups were completed, and 42 Superfund construction completions were achieved.
- In 2002 Superfund recorded 587 site assessment decisions.
- In 2001 Human exposures to toxins were controlled at 179 RCRA facilities and toxic releases to groundwater were controlled at 154 RCRA facilities, 19,074 leaking underground storage tank cleanups were completed, and 47 Superfund construction completions were completed.
- In 2001 Superfund recorded 931 site assessment decisions.
- In 2000 Human exposures to toxins were controlled at 191 RCRA facilities and toxic releases to groundwater were controlled at 168 RCRA facilities, 20,834 leaking underground storage tank cleanups were completed, and 87 Superfund construction completions were completed.
- In 2000 Superfund completed 468 site assessment decisions.

Performance Measures	FY 2000 Actuals	FY 2001 Actuals	FY 2002 Actuals	FY 2003 Actuals	FY 2004 Pres. Bud.	FY 2005 Pres. Bud.	
Number of Superfund final site assessment decisions.	468	629	587	917	475	500	assessments
Number of Superfund construction completions.	87	47	42	40	40	40	completions
Number of Superfund hazardous waste sites with human exposures controlled.				28	10	10	sites
Number of Superfund hazardous waste sites with groundwater migration controlled.				54	10	10	sites
Number of final remedies (cleanup targets) selected at Superfund sites.					20	20	remedies
Number of leaking underground storage tank cleanups completed.	20,834	19,074	15,769	18,518	21,000	21,000	cleanups
Number of high priority RCRA facilities with human exposures to toxins controlled.	191	179	207	230	166	225	facilities
Number of high priority RCRA facilities with toxic releases to groundwater controlled.	168	154	174	175	129	203	facilities

Baseline: By the end of FY 2003, Superfund controlled human exposures at 82% (1,227 of 1,494) of eligible NPL sites and controlled groundwater migration at 65% (826 of 1,275) of eligible NPL sites, and completed construction at 58% (886) of the NPL sites. Of the 1,714 RCRA Corrective Action high priority facilities, 73% (1,246) have human exposures controlled, an increase from 1,018 facilities with human exposures controlled at the end of FY 2002; and 61% (1,049) have groundwater migration controlled, an increase from 877 facilities with groundwater migration controlled by the end of FY 2002. Furthermore, at the end of FY 2001 there were 814 facilities with human exposures controlled and 737 facilities groundwater migration controlled reflecting the strong EPA/state partnership in this program. At the end of FY 2003, 303,120 cleanups of confirmed releases from Federally-regulated leaking underground storage tanks were completed since 1987. At the end of FY 2002, there was a universe of 1103 Superfund sites with final remedies selected. The Agency is currently evaluating this baseline and may adjust it downward in the future.

Superfund Cost Recovery

In 2005 Ensure trust fund stewardship by getting PRPs to initiate or fund the work and recover costs from PRPs when EPA expends trust fund monies. Address cost recovery at all NPL and non-NPL sites with a statute of limitations (SOL) on total past costs equal to or greater than \$200,000.

- In 2004 Ensure trust fund stewardship by getting PRPs to initiate or fund the work and recover costs from PRPs when EPA expends trust fund monies. Address cost recovery at all NPL and non-NPL sites with a statute of limitations (SOL) on total past costs equal to or greater than \$200,000.
- In 2003 Ensured trust fund stewardship by getting PRPs to initiate or fund the work and recover costs from PRPs when EPA expends trust fund monies. Addressed cost recovery at all NPL and non-NPL sites with a statute of limitations (SOL) on total past costs equal to or greater than \$200,000.
- In 2002 The goal was met. Cost recovery was addressed at 204 NPL and non-NPL sites of which 101 had total past costs greater than or equal to \$200,000 and potential statute of limitations (SOL) concerns. EPA secured cleanup and cost recovery commitments from private parties in excess of \$645 million.
- In 2001 Although the goal was not met, there was no loss in dollars recovered. Cost recovery was addressed at 208 NPL and non-NPL sites, of which 89 had total past costs greater than or equal to \$200,000 and potential SOL concerns. EPA addressed cost recovery for 87 of 89 sites and planned to write off costs associated with the other two SOL cases, but decision documents were not completed before the expiration of the SOL.
- In 2000 Addressed cost recovery at 98.5% of NPL and non-NPL sites with a statute of limitations on total past costs equal to or greater than \$200,000.

Performance Measures

	FY 2000 Actuals	FY 2001 Actuals	FY 2002 Actuals	FY 2003 Actuals	FY 2004 Pres. Bud.	FY 2005 Pres. Bud.	
Refer to DOJ, settle, or write off 100% of Statute of Limitations (SOLs) cases for SF sites with total unaddressed past costs equal to or greater than \$200,000 and report value of costs recovered.	98.5	97.8	100	100	100	100	Percent

Baseline: In FY 98 the Agency addressed 100 percent of cost recovery at all NPL and non-NPL sites with total past costs equal or greater than \$200,000.

Superfund Potentially Responsible Party Participation

- In 2005 Reach a settlement or take an enforcement action before the start of a remedial action at 90 percent of Superfund sites having a viable, liable responsible party other than the federal government.
- In 2004 Reach a settlement or take an enforcement action before the start of a remedial action at 90 percent of Superfund sites having a viable, liable responsible party other than the federal government.
- In 2003 Maximized all aspects of PRP participation which included maintaining PRP work at 87% of the new remedial construction starts at non-Federal Facility Superfund, and emphasized fairness in the settlement process.
- In 2002 In FY 2002 the percentage of remedial construction starts initiated by responsible parties exceeded the target by one percent.

- In 2001 Maximized all aspects of PRP participation by maintaining PRP work at 67.3% of the new remedial construction starts at non-Federal Facility Superfund sites, while emphasizing fairness in the settlement process.
- In 2000 Maximized all aspects of PRP participation by maintaining PRP work at 68% of the new remedial construction starts at non-Federal Facility Superfund sites, while emphasizing fairness in the settlement process.

Performance Measures	FY 2000 Actuals	FY 2001 Actuals	FY 2002 Actuals	FY 2003 Actuals	FY 2004 Pres. Bud.	FY 2005 Pres. Bud.	
Ensure fairness by making Orphan Share Offers at 100% of all eligible settlement negotiations for response work.	100						Percent
PRPs conduct 70% of the work at new construction starts	68	67.3	71	87			Percent
Percentage of Superfund sites at which settlement or enforcement action taken before the start of RA.					90	90	Percent

Baseline: In FY 98 approximately 70% of new remedial work at NPL sites (excluding Federal facilities) was initiated by private parties. In FY2003, a settlement was reached or an enforcement action was taken with non-Federal PRPs before the start of the remedial action at approximately 90 percent of Superfund sites.

OBJECTIVE: ENHANCE SCIENCE AND RESEARCH

Through 2008, provide and apply sound science for protecting and restoring land by conducting leading-edge research and developing a better understanding and characterization of environmental outcomes under Goal 3.

Research

Scientifically Defensible Decisions for Site Clean

- In 2005 Complete at least four SITE demonstrations, with emphasis on NAPLs and sediments, in order to, by 2010, develop or evaluate 40 scientific tools, technologies, methods, and models, and provide technical support that enable practitioners to 1) characterize the nature and extent of multimedia contamination; 2) assess, predict, and communicate risks to human health and the environment; 3) employ improved remediation options; and 4) respond to oil spills effectively.
- In 2004 Provide risk assessors and managers with site-specific data sets on three applications detailing the performance of conventional remedies for contaminated sediments to help determine the most effective techniques for remediating contaminated sites and protecting human health and the environment.
- In 2003 Delivered state-of-the-science report and methods to EPA and other stakeholders for risk management of fuel oxygenates; organic and inorganic contamination of sediments, ground water and/or soils; and oil spills to ensure cost-effective and technically sound site clean-up.

- In 2002 EPA provided evaluation information on six innovative approaches that reduce human health and ecosystem exposure from dense nonaqueous phase liquids (DNAPLs) and methyl tertiary butyl-ether (MTBE) in soils and groundwater, and from oil and persistent organics in aquatic systems.
- In 2001 EPA provided technical information to support scientifically defensible and cost-effective decisions for clean-up of complex sites, hard-to-treat wastes, mining, oil spills near shorelines, and Brownfields to reduce risk to human health and the environment.
- In 2000 The MTBE case studies summary report was delayed to include more than the original four sites. The SITE report was sent to OMB in FY 2000, but the time required for approval delayed its arrival in Congress. The dermal exposure route report was delayed until 12/00 to allow for completing peer review.

Performance Measures	FY 2000 Actuals	FY 2001 Actuals	FY 2002 Actuals	FY 2003 Actuals	FY 2004 Pres. Bud.	FY 2005 Pres. Bud.	
Summary Report of Case Studies of Natural Attenuation of MTBE, a fuel additive, at Geographically Diverse Locations	0						report
Superfund Innovative Technology Evaluation (SITE) Program Report to Congress.	18-Jan-2001						report
A report summarizing the key research findings methods, models, and factors relating to evaluating the risks from the dermal route of exposure.	31-Dec-2000						report
Review the 20 most common Superfund soil contaminants and develop eco-toxicity soil screening levels for wildlife and soil biota for chemicals where there is sufficient data.	30-Sep-2000						values
Deliver the Annual SITE Program Report to Congress.		0					report
Complete draft of the FY 2002 Annual SITE Report to Congress.			1	1			draft report
Reports on performance data for conventional sediment remedies for three sites.					3		reports
SITE demonstrations completed						4	demonstrations

Baseline: This APG will contribute to an array of assessment and remediation options targeted to addressing situations where uncertainty remains high, technology performance is lacking, or where existing options are cost- or time-intensive. Through FY 2005, non-aqueous phase liquids (NAPLs) and contaminated sediments will be of special interest because of the cost and complexity of assessing and remediating these sites, as well as the risks they pose to public health. EPA estimates that approximately 20% of National Priorities List (NPL) sites

have contaminated sediments with risk from a number of toxic substances (<http://www.epa.gov/superfund/resources/sediment/index.htm>). Available remedies are unproven, expensive to implement, or both. The SITE program evaluates tools, technologies, and approaches for remediation, measurement, and monitoring. The innovative approaches that are evaluated are largely developed in the private sector. The purpose of the program is to provide an independent assessment of performance, so that site decision-makers can gain confidence in selecting an innovative approach. Since the inception of the SITE program in 1986, clean-up of contaminated sites through the use of innovative technologies has resulted in an estimated net cost savings of \$2.4 billion (<http://www.epa.gov/ORD/SITE/congress/540R03502/540R03502.htm>). Beginning in FY 2005, regular evaluations by independent and external panels will provide reviews of EPA research programs' relevance, quality, and successful performance to date, in accordance with OMB's Investment Criteria for Research and Development. Reviewers will also qualitatively determine whether EPA has been successful in meeting its annual and long-term commitments for research. Recommendations and results from these reviews will improve the design and management of EPA research programs and help to measure progress under the Government Performance and Results Act (GPRA).

GOAL: HEALTHY COMMUNITIES AND ECOSYSTEMS

Protect, sustain, or restore the health of people, communities, and ecosystems using integrated and comprehensive approaches and partnerships.

OBJECTIVE: CHEMICAL, ORGANISM, AND PESTICIDE RISKS

Prevent and reduce pesticide, chemical, and genetically engineered biological organism risks to humans, communities, and ecosystems.

Decrease Risk from Agricultural Pesticides

- In 2005 Ensure new pesticide registration actions (including new active ingredients, new uses) meet new health standards and are environmentally safe.
- In 2005 Percentage of acre treatments that will use applications of reduced-risk pesticides
- In 2004 Decrease adverse risk from agricultural uses from 1995 levels.
- In 2003 FY 2003 data will be avail. in 2004 to verify decreased adverse risk from agricultural uses from 1995 levels and assure that new pesticides that enter the market are safe for humans and the environ., through ensuring that all registration action are timely and comply with standards mandated by law.
- In 2002 In FY 2002, EPA continued to register pest control products, including "safer" pesticides, thus ensuring that growers have an adequate number of pest control options available to them.
- In 2001 The Agency registered 9 new chemicals, exceeding its target by 2, and 267 new chemicals, underperforming its target by 83.
- In 2000 The Registration Program completed registrations for 9 new chemicals, 3069 amendments, 1106 me-toos, 427 new uses, 95 inerts, 458 special registrations, 452 tolerances, and 13 reduced risk chemicals/biopesticides.

Performance Measures	FY 2000 Actuals	FY 2001 Actuals	FY 2002 Actuals	FY 2003 Actuals	FY 2004 Pres. Bud.	FY 2005 Pres. Bud.	
Register safer chemicals and biopesticides	13		107	124	131	135	Regist. (Cum)
New Chemicals (Active Ingredients)	9	53	60	72	74	84	Regist. (Cum)
New Uses	427	1896	2329	425	3,079	3479	Actions (Cum)
Percentage of acre-treatments with reduced risk pesticides			7.5%	Data Lag	8.5%	8.7%	Acre-Treatments
Maintain timeliness of S18 decisions						45	Days
Reduce registration decision times for new conventional chemicals						7%	Reduction
Reduce registration decision times for reduced risk chemicals						3%	Reduction

Baseline: The baseline for registration of reduced risk pesticides, new chemicals, and new uses, is zero in the year 1996 (the year FQPA was enacted). Progress is measured cumulatively since 1996. The baseline for acres-treated is 3.6% of total acreage in 1998, when the reduced-risk pesticide acres-treatments was 30,332,499 and total (all pesticides) was 843,063,644 acre-treatments. Each year's total acre-treatments, as reported by Doane Marketing Research, Inc .serves as the basis for computing the percentage of acre-treatments using reduced risk pesticides. Acre-treatments count the total number of pesticide treatments each acre receives each year. As of 2003, there are no products registered for use against other potential bio-agents (non-anthrax). Conventional pesticides FY 2002 baseline for reducing decision time is 44 months; reduced risk pesticides FY 2002 baseline for reducing time is 32.5 months. The 2005 baseline for expedited new active ingredient pesticides is 4. The S18 2005 baseline is 45 days.

Reduce use of highly toxic pesticides

- In 2005 Decrease occurrence of residues of carcinogenic and cholinesterase-inhibiting neuortic pesticides on foods eaten by children from their average 1994-1996 levels
- In 2004 Decrease occurrence of residues of carcinogenic and cholinesterase-inhibiting pesticides on foods eaten by children from their average 1994-1996 levels.
- In 2003 Data available in 2004.

Performance Measures

	FY 2000 Actuals	FY 2001 Actuals	FY 2002 Actuals	FY 2003 Actuals	FY 2004 Pres. Bud.	FY 2005 Pres. Bud.	
Reduction of detections on a core set of 19 foods eaten by children relative to detection levels for those foods reported in 1994-1996.				Data lag	25%	27%	Reduced Detect.

Baseline: Percent occurrence of residues of FQPA priority pesticides (organophosphates and carbamates) on samples of children's foods in baseline years 94-96. Baseline percent is 33.5% of composite sample of children's foods: apples, apple juice, bananas, broccoli, carrots, celery, grapes, green beans (fresh, canned, frozen), lettuce, milk, oranges, peaches, potatoes, spinach, sweet corn (canned and frozen), sweet peas (canned and frozen), sweet potatoes, tomatoes, and wheat.

Reassess Pesticide Tolerances

- In 2005 Ensure that through ongoing data reviews, pesticide active ingredients, and products that contain them are reviewed to assure adequate protection for human health and the environment, taking into consideration exposure scenarios such as subsistence lifestyles of the Native Americans
- In 2004 Ensure that through on-going data reviews, pesticide active ingredients and the products that contain them are reviewed to assure adequate protection for human health and the environment, taking into consideration exposure scenarios such as subsistence lifestyles of Native Americans.

- In 2003 Assured that pesticides active ingredients registered prior to 1984 and the products that contain them were reviewed to assure adequate protection for human health & the envir. Also considered the unique exposure scenarios such as subsistence lifestyles of Native Americans in regulatory decisions.
- In 2002 Reregistration efforts delayed to focus on reviewing and testing pesticides against anthrax.
- In 2001 EPA reassessed 40% of tolerances requiring reassessment under FQPA and issued a cumulative 72% of total REDs required, achieving both targets.
- In 2000 We did not achieve our FY2000 target for tolerance reassessments due to the ongoing work to establish a science policy on cumulative risk. Although we missed our annual target, we are still on track to meet our statutory deadlines to reassess all tolerances.

Performance Measures	FY 2000 Actuals	FY 2001 Actuals	FY 2002 Actuals	FY 2003 Actuals	FY 2004 Pres. Bud.	FY 2005 Pres. Bud.	
Tolerance Reassessment	121	40%	66.9	68	78%	87.7%	Tolerances(Cum)
Reregistration Eligibility Decisions (REDs)	6		72.7%	75	81.7%	88.2%	Decisions (Cum)
Product Reregistration	552		307	306	750	400	Actions
Tolerance reassessments for top 20 foods eaten by children		43.5%	65.6	65.6	83%	93%	Tolerances(Cum)
Number of inert ingredients tolerances reassessed					100	100	tolerances
Reduce decision time for REDs						7%	Reduction

Baseline: The baseline value for tolerance reassessments is the 9,721 tolerances that must be reassessed by 2006 using FQPA health and safety standards. The baseline for REDs is the 612 REDs that must be completed by 2008. The baseline for inerts tolerances is 870 that must be reassessed by 2006. The baseline for the top 20 foods eaten by children is 893 tolerances that must be reassessed by 2006. Tribal Pilot of 2 models in FY 2003; total number of models to be determined (current estimate is 16-18). Reregistration decision time baseline 38-40 months.

Testing of Chemicals in Commerce for Endocrine Disruptors

- In 2005 Standardization and validation of screening assays
- In 2004 Standardization and validation of screening assays

Performance Measures	FY 2000 Actuals	FY 2001 Actuals	FY 2002 Actuals	FY 2003 Actuals	FY 2004 Pres. Bud.	FY 2005 Pres. Bud.	
Screening Assays Completed					11	11	Screening assay

Baseline: The non-prioritized universe of chemicals that needs to be considered for prioritization includes: pesticide active ingredients, pesticide inert ingredients, chemicals on the TSCA Inventory, environmental contaminants, food additives, pharmaceuticals, cosmetics, nutritional supplements, and representative mixtures. "Priority-setting" refers to the determination of priorities for entry into Tier 1 Screening. The baseline for the Tier 1 screening measure is zero in 1996 - no valid methods for endocrine disruptor screening and testing existed when FQPA was enacted in FY1996.

Process and Disseminate TRI Information - OEI

- In 2005 The increased use of the Toxic Release Inventory Made Easy (TRI-ME) will result in a total burden reduction of 5% for Reporting Year 2004 from Reporting Year 2003 levels.
- In 2004 The increased use of the Toxic Release Inventory Made Easy (TRI-ME) will result in a total burden reduction of 5% for Reporting Year 2003 from Reporting Year 2002 levels.
- In 2003 8,000 facilities reported expanded information on releases and waste management of lead and lead compounds in TRI in Reporting Year 2001 and increased usage of TRI-ME which resulted in total burden reduction of 5% for Reporting Year 2002.
- In 2002 EPA reduced reporting burden, improved data quality, lowered program costs, and speeded data publication by increasing the amount of TRI electronic reporting from 70% to 92%.
- In 2001 120,000 chemical submissions and revisions processed; published annual summary of TRIS database in April 2001; and TRI Public Data Release published in April 2001.
- In 2000 Processed all submitted facility chemical release reports, published annual summary of TRI data, provided improved information to the public about TRI chemicals, and maximized public access to TRI information.

Performance Measures	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	
	Actuals	Actuals	Actuals	Actuals	Pres. Bud.	Pres. Bud.	
Total electronic reporting of all chemical submissions processed. (Includes diskette submissions created by ATRS, TRI-ME, and other reporting software programs, as well as web-based submissions.)			92				Percent
TRI Public Data Release	Published	Published					Published
Chemical submissions and revisions processed.	119,000	120,000					Forms
TRIS database complete and report issued	On Target	Published					Published
Facilities reporting releases and waste management of lead and lead compounds.				8561			Facilities
Percentage of TRI chemical forms submitted over the Internet using TRI-ME and the Central Data Exchange.				25	50	55	Percent

Baseline: In FY 2001, TRI electronic reporting was 70%.

Reduce Wildlife Incidents and Mortalities

In 2005 Reduce from 1995 levels the number of incidents involving mortalities to nontargeted terrestrial and aquatic wildlife caused by pesticides

In 2004 Reduce Wildlife Incidents and Mortalities

Performance Measures	FY 2000 Actuals	FY 2001 Actuals	FY 2002 Actuals	FY 2003 Actuals	FY 2004 Pres. Bud.	FY 2005 Pres. Bud.	
Number of incidents and mortalities to terrestrial and aquatic wildlife caused by the 15 pesticides responsible for the greatest mortality to such wildlife					5	11	reduction

Baseline: 80 reported bird incidents (involving 1150 estimated bird casualties); 65 reported fish incidents (involving 632,000 estimated fish casualties) as reported in 1995.

Exposure to Industrial / Commercial Chemicals

In 2005 Reduce exposure to and health effects from priority industrial / commercial chemicals

In 2004 Reduce exposure to and health effects from priority industrial / commercial chemicals

In 2001 Capacitor, Transformer and Bulk Waste data reported by industry on a calendar year basis and not available until September 2002. The Transformer Reclassification Rule was published on April 2, 2001.

Performance Measures	FY 2000 Actuals	FY 2001 Actuals	FY 2002 Actuals	FY 2003 Actuals	FY 2004 Pres. Bud.	FY 2005 Pres. Bud.	
Safe Disposal of Transformers		4,885			5,000	5000	Transformers
Safe Disposal of Capacitors		9,494			9,000	9000	Capacitors
number of children aged 1-5 years with elevated blood lead levels (>10 ug / dl)					270,000	225,000	children

Baseline: 1999/2000 baseline released in January 2003: Approximately 400,000 cases of childhood lead poisoning cases according to NHANES data. In 2004 a larger data set will be included as we will be expanding to include more EPA Regional efforts that will include all Federally administered and State administered programs. Introduced the "number of children aged 1-5 years" measure in FY2004. Since the baseline is 1999/2000 data we are unable to project targets for 2004 and 2005 due to the data-lag. The FY2003 data for a new baseline may not be available until 2005. The baseline for PCB transformers is estimated at 2.2 million units and for capacitors is estimated at 1.85 million units as of 1988 as noted in the 1989 PCB Notification and Manifesting Rule. From 1991-2001 there was a declining trend in PCB disposal due to failing equipment and environmental liability: the total number of PCB large

capacitors safely disposed of 436,485 and the total number of PCB transformers safely disposed of 172,672 as of 2002.

Risks from Industrial / Commercial Chemicals

- | | |
|---------|---|
| In 2005 | Identify, restrict, and reduce risks associated with industrial/commercial chemicals. |
| In 2004 | Identify and reduce risks associated with international industrial/commercial chemicals. |
| In 2004 | Identify, restrict, and reduce risks associated with industrial/commercial chemicals. |
| In 2003 | Of the approx. 1,633 applic. for new chem. and microorganisms submitted by industry, ensured those marketed are safe for humans and the envir. Increased proportion of commer. chem. that have undergone PMN review to signify they are properly managed and may be potential green altern. to exist. chem. |
| In 2002 | EPA reviewed all 1,943 Pre-manufacturing Notices received during FY 2002. At the end of 2002, 21.5 percent of all chemicals in commerce had been assessed for risks. A large fraction of these chemicals also may be "green" alternatives to existing chemicals in commerce. |
| In 2001 | Data was obtained from test plans submitted by industry for 724 chemicals already in commerce. |
| In 2001 | EPA reviewed 1,770 Premanufacturing Notices. By the end of 2001, 21 percent of all chemicals in commerce had been assessed for risks. |
| In 2000 | All new chemical pre-manufacturing notification submissions were reviewed within the required timeframe. |

Performance Measures	FY 2000 Actuals	FY 2001 Actuals	FY 2002 Actuals	FY 2003 Actuals	FY 2004 Pres. Bud.	FY 2005 Pres. Bud.	
Number of TSCA Pre-Manufacture Notice Reviews	1838	1770	1943	1,633	1700		Notices
Through chemical testing program, obtain test data for high production volume chemicals on master testing list.		724					Chemicals
Notice of Commencements		21.0					NOCs (Cum)
Make screening level health and environmental effects data publicly available for sponsored HPV chemicals			843		1300		cum. chemicals
Reduction in the current year production-adjusted Risk Screening Environmental Indicators risk-based score of releases and transfers of toxic chemicals.					9%	12%	Index
High Production Volume chemicals with complete Screening Information Data Sets (SIDS) submitted to OECD SIDS Initial Assessment Meeting					75		chemicals
Percentage of chemicals identified as highest priority by the Acute Exposure Guideline Levels (AEGLs) Program with short-term exposure limits established.						52%	Total Chemicals

Baseline: The baseline for TSCA PMNs in FY2004 is zero. (EPA receives about 1,700 PMNs per year for chemicals about to enter commerce. From 1979-2002, EPA reviewed about 40,000 PMNs. Of the 78,000 chemicals potentially in commerce, 16,618 have gone through the risk-screening process of Notice of Commencement.) The baseline for HPV measure is zero chemicals in 1998. The baseline for the RSEI measure is the index calculated for 2001. Baseline is 2002; calculation methodology by addition of AEGL values (10 minute, 1 hour, 4 hour and 24 hour exposure periods) and numbers of chemicals addressed. There is a list maintained by the AEGL FACA committee of highest priority chemicals: 99 chemicals are on List 1 which was generated at the program's inception in 1996 and 137 chemicals are highest priority on List 2 which was generated in 2001. Therefore the total of highest priority chemical stands today at 236 chemicals, however chemicals can be added or deleted from the list to fit stakeholder needs which is why we have decided to provide percentage targets. 2001 levels will serve as the baseline reference point for the percent reduction in relative risk index for chronic human health associated with environmental releases of industrial chemicals in commerce as measured by Risk Screening Environmental Indicators Model analyzing results to date. Measurement Development Plans exist for HPV, VCCEP, and New Chemicals.

Chemical Facility Risk Reduction

- In 2005 Protect human health, communities, and ecosystems from chemical risks and releases through facility risk reduction efforts and building community infrastructures.
- In 2004 Protect human health, communities, and ecosystems from chemical risks and releases through facility risk reduction efforts and building community infrastructures.
- In 2003 Data available in March 2004.
- In 2002 EPA audited 350 risk management plans.
- In 2001 5 states implemented accident prevention programs and 438 risk management plan audits were completed.
- In 2000 Three states implemented accident prevention programs and 266 risk management plan audits were completed.

Performance Measures	FY 2000 Actuals	FY 2001 Actuals	FY 2002 Actuals	FY 2003 Actuals	FY 2004 Pres. Bud.	FY 2005 Pres. Bud.	
Number of risk management plan audits completed.	266	438	350	Data lag	400	400	audits
Number of states implementing chemical accident prevention programs.	3	5	1				states

Baseline: By the end of FY 2001, 438 risk management plan audits were completed, and 15 states had implemented accident prevention programs.

OBJECTIVE: COMMUNITIES

Sustain, clean up, and restore communities and the ecological systems that support them.

U.S. - Mexico Border Water/Wastewater Infrastructure

- In 2005 In the US-Mexico Border Region, sustain and restore community health, and preserve the ecological systems that support them.
- In 2004 Increase the number of residents in the Mexico border area who are protected from health risks, beach pollution and damaged ecosystems from nonexistent and failing water and wastewater treatment infrastructure by providing improved water and wastewater service.
- In 2003 Increased the number of residents in the Mexico border area who are protected from health risks, beach pollution and damaged ecosystems from nonexistent and failing water and wastewater treatment infrastructure by providing improved water and wastewater service.
- In 2002 Increase the number of residents to 720,000 in the Mexico border area who are protected from health risks, beach pollution and damaged ecosystems from nonexistent and failing water and wastewater treatment infrastructure by providing improved water and wastewater service.
- In 2001 Provided protection to over 576,405 residents in the Mexico border area from health risks, beach pollution and damaged ecosystems from nonexistent and failing water and wastewater treatment infrastructure by providing improved water and wastewater service.

In 2000 10 Additional water/wastewater projects (cumulative total of 36) along the Mexican border have been certified for design-construction.

Performance Measures	FY 2000 Actuals	FY 2001 Actuals	FY 2002 Actuals	FY 2003 Actuals	FY 2004 Pres. Bud.	FY 2005 Pres. Bud.	
Number of people in Mexico border area protected from health risks, because of adequate water & wastewater sanitation systems funded through border environmental infrastructure funding. (cumulative)		576,405	720,000	872,000	990,000	1.5 Million	People
Projects certified for design-construction along the Mexican Border	10						Projects

Baseline: The US-Mexico border region extends more than 3,100 kilometers (2,000 miles) from the Gulf of Mexico to the Pacific Ocean, and 62.5 miles on each side of the international border. More than 11.8 million people reside along the border and this figure is expected to increase to 19.4 million by 2020. Ninety percent of the population reside in the 14 impaired, interdependent sister cities. Rapid population growth in urban areas has resulted in unplanned development, greater demand for land and energy, increased traffic congestion, increased waste generation, overburdened or unavailable waste treatment and disposal facilities, and more frequent chemical emergencies. Rural areas suffer from exposure to airborne dust, pesticide use, and inadequate water supply and treatment facilities. EPA, other US Federal agencies, and the Government of Mexico have partnered to address these environmental problems.

World Trade Organization - Regulatory System

In 2005 Assist trade partner countries in completing environmental reviews

Performance Measures	FY 2000 Actuals	FY 2001 Actuals	FY 2002 Actuals	FY 2003 Actuals	FY 2004 Pres. Bud.	FY 2005 Pres. Bud.	
Number of environmental reviews initiated by FTAA countries following the enactment of the 2002 Trade Promotion Act (TPA).						3	countries

Baseline: As of the end of FY 2003, two environmental reviews (Chile and Singapore) have been initiated since the enactment of the 2002 Trade Promotion Act.

Revitalize Properties

In 2005 Leverage jobs by assessing, promoting the cleanup and reuse of brownfields properties.

In 2004 Leverage jobs by assessing, promoting the cleanup and reuse of brownfields properties.

- In 2003 Available data shows that the Brownfields program has generated 1,202 jobs and placed 62% of the job training program participants as of the third quarter.
- In 2003 EPA is on track to leverage or generate \$0.9 B through revitalization efforts.
- In 2002 \$0.75 billion of cleanup and redevelopment was leveraged.
- In 2002 4,418 jobs were leveraged from Brownfields activities.
- In 2001 \$1.2 billion of cleanup and redevelopment was leveraged.
- In 2001 8,232 jobs were leveraged from Brownfields activities.
- In 2000 3,030 jobs were leveraged from Brownfields activities.

Performance Measures	FY 2000 Actuals	FY 2001 Actuals	FY 2002 Actuals	FY 2003 Actuals	FY 2004 Pres. Bud.	FY 2005 Pres. Bud.	
Number of Brownfields properties assessed.	337	676	1,158	472 (qtr 3)	1,000	1,000	assessments
Number of Brownfields cleanup grants awarded.					25	25	grants
Number of properties cleaned up using Brownfields funding.					no target	60	properties
Estimated number of Brownfield property acres available for reuse or continued use.					no target	no target	acres
Number of jobs leveraged from Brownfields activities.	3,030	8,232	4,418	1,202 (qtr 3)	2,000	5,000	jobs
Percentage of Brownfields job training trainees placed.				62% (qtr 3)	65%	65%	trainees placed
Amount of cleanup and redevelopment funds leveraged at Brownfields sites.		\$1.2B	\$0.75B	\$0.3B (qtr3)	\$0.9B	\$1.0B	funds

Baseline: By the end of FY 2002, the Brownfields program had leveraged 19,646 jobs, provided job training to 913 individuals, placed an average of 65% of job training participants, and leveraged a total of \$6.7 billion. Data reported for FY 2002 reflect accomplishments up to the 3rd quarter of FY 2002.

OBJECTIVE: ECOSYSTEMS

Protect, sustain, and restore the health of natural habitats and ecosystems.

Protecting and Enhancing Estuaries

In 2005 Working with NEP partners, protect or restore an additional 25,000 acres of habitat within the study areas for the 28 estuaries that are part of the National Estuary Program (NEP).

In 2004 Restore and protect estuaries through the implementation of Comprehensive Conservation and Management Plans (CCMPs).

- In 2003 Restored and protected estuaries through the implementation of Comprehensive Conservation and Management Plans (CCMPs).
- In 2002 Restored and protected over 137,000 acres of estuary habitat through the implementation of Comprehensive Conservation and Management Plans (CCMPs).
- In 2001 Restored and protected 70,000 acres of estuaries through the implementation of Comprehensive Conservation and Management Plans (CCMPs).

Performance Measures	FY 2000 Actuals	FY 2001 Actuals	FY 2002 Actuals	FY 2003 Actuals	FY 2004 Pres. Bud.	FY 2005 Pres. Bud.	
Acres of habitat restored and protected nationwide as part of the National Estuary Program. (incremental)		70,000	137,710	118,171	35,000	25,000	Acres

Baseline: As of January 2000, there were over 600,000 acres of habitat preserved, restored, and/or created.

Gulf of Mexico

- In 2005 Prevent water pollution and protect aquatic species in order to improve the health of the Gulf of Mexico.
- In 2004 Assist the Gulf States in implementing watershed restoration actions in 71 (5-year rolling average) priority impaired coastal river and estuary segments.
- In 2003 Assisted the Gulf States in implementing watershed restoration actions in 14 priority impaired coastal river and estuary segments.
- In 2002 Assisted the Gulf States in implementing restoration actions by supporting the identification of place-based projects in 137 State priority coastal river and estuary segments.
- In 2001 Assisted the Gulf States in implementing watershed restoration action strategies (WRAS) or their equivalent in 37 priority coastal river and estuary segments.
- In 2000 Assisted the Gulf states in implementing watershed restoration action strategies (WRAS) or similar plans to restore waterbodies in 14 priority impaired coastal river and estuary segments.

Performance Measures	FY 2000 Actuals	FY 2001 Actuals	FY 2002 Actuals	FY 2003 Actuals	FY 2004 Pres. Bud.	FY 2005 Pres. Bud.	
Impaired Gulf coastal river and estuary segments implementing watershed restoration actions (incremental).	31	37	137	95	71 (5 yr rolling average)		Segments
Reduce releases of nutrients throughout the Mississippi River Basin that affect the size of the hypoxic zone in the Gulf of Mexico, as measured by the five year running average						< 14,128	KM2

Baseline: There are 95 coastal watersheds at the 8-digit hydrologic unit code (HUC) scale on the Gulf coast. The Gulf of Mexico Program has identified 12 priority coastal areas for assistance. These 12 areas include 30 of the 95 coastal watersheds. Within the 30 priority watersheds, the Gulf States have identified 354 segments that are impaired and not meeting full designated uses under the States' water quality standards. The 1996-2000 running average size = 14,128 km2.

Great Lakes Assessment and Implementation Actions

- In 2005 Prevent water pollution and protect aquatic systems so that overall ecosystem health of the Great Lakes is improved by at least 1 point
- In 2004 Great Lakes ecosystem components will improve, including progress on fish contaminants, beach closures, air toxics, and trophic status.
- In 2003 End of year data will be available in 2004 to verify that Great Lakes ecosystem components have improved, including progress on fish contaminants, beach closures, air toxics, and trophic status.
- In 2002 By removing or containing contaminated sediments, 100,000-200,000 pounds of persistent toxics which could adversely affect human health will no longer be biologically available through the food chain. This contributes to decreasing fish contaminants and advances the goal of removing fish advisories
- In 2001 Great Lakes ecosystem components improved, including progress on fish contaminants, beach toxics, air toxics, and trophic status.
- In 2000 6,000 of acres of aquatic, wetland, riverine, and terrestrial Great Lakes habitats were positively impacted.

Performance Measures	FY 2000 Actuals	FY 2001 Actuals	FY 2002 Actuals	FY 2003 Actuals	FY 2004 Pres. Bud.	FY 2005 Pres. Bud.	
Long-term concentration trends of toxics (PCBs) in Great Lakes top predator fish.		Uncertain	Declining	Data Lag	5%		Annual decrease
Long-term concentration trends of toxic chemicals in the air.		Declining	Declining	Data Lag	7%		Annual decrease
Total phosphorus concentrations (long-term) in the Lake Erie Central Basin.		Improving	Mixed	18.4	10	10	Ug/l
Average concentrations of PCBs in whole lake trout and walleye samples will decline.						5%	Annual Decrease
Average concentrations of toxic chemicals in the air in the Great Lakes basin will decline						5%	Annual Decrease
Restore and delist Areas of Concern (AOCs) within the Great Lakes basin						3	AOC
Cubic yards (in millions) of contaminated sediment remediated in the Great Lakes (cumulative from 1997).						2.9	Cubic yards (millions)
Great Lakes Ecosystem Indicator Indices with reports, addressing select fish contaminants, atmospheric deposition, limnology, biology, and sediments.	10						
Model predictions for Lake Michigan for toxics reduction scenarios.	5						

Baseline: Great Lakes rating of 20 on a 40 point scale where the rating uses select Great Lakes State of the Lakes Ecosystem indicators based on a 1 to 5 rating system for each indicator, where 1 is poor and 5 is good. The trend (starting with 1972 data) for toxics in Great Lakes top predator fish is expected to be less than 2 parts per million (the FDA action level) but far above the Great Lakes Initiative target or levels at which fish advisories can be removed. The trend (starting with 1992 data) for PCB concentrations in the air is expected to range from 50 to 250 picograms per cubic meter. In 2002, no Areas of Concern had been delisted. 2.1 million yards of remediated sediments are the cumulative number of yards from 1997 - 2001.

Wetland and River Corridor Projects

In 2005 Working with partners, achieve no net loss of wetlands

Performance Measures	FY 2000 Actuals	FY 2001 Actuals	FY 2002 Actuals	FY 2003 Actuals	FY 2004 Pres. Bud.	FY 2005 Pres. Bud.	
Annually, in partnership with the Corps of Engineers and States, achieve no net loss of wetlands in the Clean Water Act Section 404 regulatory program						No Net Loss	Acres
Working with partners, achieve no net loss of acres						No Net Loss	Acres

Baseline: Annual net loss of an estimated 58,500 acres. In partnership with the Corps of Engineers, a baseline and initial reporting will begin in FY 2004 on net loss of wetlands in the CWA Section 404 regulatory programs.

Chesapeake Bay Habitat

- In 2005 Prevent water pollution and protect aquatic systems so that overall aquatic system health of the Chesapeake Bay is improved enough so that there are 91,000 acres of submerged aquatic vegetation. (cumulative)
- In 2005 Reduce nitrogen loads by 74 million pounds per year; phosphorus loads by 8.7 million pounds per year, and sediment loads by 1.06 million tons per year from entering the Chesapeake Bay, from 1985 levels
- In 2004 Improve habitat in the Chesapeake Bay.
- In 2003 Improved habitat in the Chesapeake Bay.
- In 2002 Meeting the annual performance goal to improve habitat in the Bay requires adherence to commitments made by the Chesapeake 2000 agreement partners and monumental effort/resources from all levels of government (local, state, and a range of Federal agencies) and from private organizations/citizens.
- In 2001 Improved habitat in the Chesapeake Bay by reducing 48.1 million pounds of nitrogen, 6.84 million pounds of phosphorous and restored over 69,000 acres of submerged aquatic vegetation.
- In 2000 In the Chesapeake Bay watershed, 1,032 stream miles of migratory fish habitat was reopened through the provision of fish passages, construction and restoration of 11,000 acres of oyster habitat, and 41% of wastewater flow to the Bay was treated by Biological Nutrient Removal.

Performance Measures	FY 2000 Actuals	FY 2001 Actuals	FY 2002 Actuals	FY 2003 Actuals	FY 2004 Pres. Bud.	FY 2005 Pres. Bud.	
Reduction, from 1985 levels, of nitrogen (M/lbs), phosphorus (M/lbs), and sediment loads (tons) entering Chesapeake Bay. (cumulative)						74/8.7/1.06	Lbs/Lbs/Tons
Acres of submerged aquatic vegetation (SAV) present in the Chesapeake Bay. (cumulative)	68,125	69,126	85,252	89,659	90,000	91,000	Acres

Baseline: In 1984, there were 37,000 acres of submerged aquatic vegetation in the Chesapeake Bay. In 2002, baseline for nitrogen loads was 51 million pounds per year; phosphorus loads was 8.0 million pounds per year; and sediment loads was 0.8 million tons per year.

OBJECTIVE: ENHANCE SCIENCE AND RESEARCH

Through 2008, provide a sound scientific foundation for EPA's goal of protecting, sustaining, and restoring the health of people, communities, and ecosystems by conducting leading-edge research and developing a better understanding and characterization of environmental outcomes under Goal 4.

Research

Research to Support FQPA

In 2005 Provide high quality exposure, effects and assessment research results that support the August 2006 reassessment of current-use pesticide tolerances to EPA's Office of Pesticide Programs so that, by 2008, EPA will be able to characterize key factors influencing children's and other subpopulations' risks from pesticide exposure.

Performance Measures	FY 2000 Actuals	FY 2001 Actuals	FY 2002 Actuals	FY 2003 Actuals	FY 2004 Pres. Bud.	FY 2005 Pres. Bud.	
Children's exposure data and tools for assessing aggregate exposure to residential-use pesticides						09/30/05	data/tools

Baseline: The Food Quality Protection Act (FQPA) requires EPA to review, by August 2006, the pesticide tolerances for pesticides in use as of August 1996. EPA's Office of Research Development (ORD) has been conducting research to generate new and improved exposure and effects tools (data, methods, and models) to assist the Office of Pesticide Programs (OPP) in meeting this 2006 requirement. In FY05, ORD will provide OPP with a summary document highlighting the key results from ORD's exposure research program over the period 2000-2005. ORD will also provide OPP with validated children's pesticide exposure data and exposure factor data from multiple exposure field and laboratory studies. This high quality data will fill critical data gaps and eliminate the need for using many default assumptions currently used in the risk assessment process. An analysis of these results will also be performed to help identify remaining critical children's exposure data needs. ORD will also provide OPP with a suite of exposure-to-dose models that can be used to estimate aggregate pesticide exposures for children (by age and developmental life stage) and other susceptible subpopulations. These state-of-the-art models will be used by OPP to develop pesticide exposure distributions and address key issues associated with variability and uncertainty in exposure. With improved information, EPA can better protect public health from risks posed by pesticide use.

Beginning in FY 2005, regular evaluations by independent and external panels will provide reviews of EPA research programs' relevance, quality, and successful performance to date, in accordance with OMB's Investment Criteria for Research and Development. Reviewers will also qualitatively determine whether EPA has been successful in meeting its annual and long-term commitments for research.

Risk Assessment

In 2005 Through FY2005 initiate or submit to external review 28 human health assessments and complete 12 human health assessments through the Integrated Risk Information System (IRIS). This information will improve EPA's and other decisionmakers' ability to protect the public from harmful chemical exposure

Performance Measures	FY 2000 Actuals	FY 2001 Actuals	FY 2002 Actuals	FY 2003 Actuals	FY 2004 Pres. Bud.	FY 2005 Pres. Bud.	
Complete 4 human health assessments and publish their results on the IRIS website					4		assessments
Initiate or submit to external peer review human health assessments of at least 20 high priority chemicals.					20		assessments
Complete 8 human health assessments and publish their results on the IRIS website						8	assessments
Initiate or submit to external peer review human health assessments of 8 high priority chemicals						8	assessments

Baseline: IRIS is an EPA data base containing Agency consensus scientific positions on potential adverse human health effects that may result from exposure to chemical substances found in the environment. IRIS currently provides information on health effects associated with chronic exposure to over 500 specific chemical substances. IRIS contains chemical-specific summaries of qualitative and quantitative health information in support of the first two steps of the risk assessment process, i.e., hazard identification and dose-response evaluation. Combined with specific situational exposure assessment information, the information in IRIS may be used as a source in evaluating potential public health risks from environmental contaminants. IRIS is widely used in risk assessments for EPA regulatory programs and site-specific decision making. Updating IRIS with new scientific information is critical to maintaining information quality and providing decision makers with a credible source of health effects information. Achieving this APG will provide EPA and other decision makers with needed updates to IRIS so they can make informed decisions on how to best protect the public from harmful chemical exposure. In FY 2004, the Agency will complete 4 human health assessments and initiate or submit for external peer review human health assessments of at least 20 high priority chemicals. In FY 2005, EPA will complete 8 more assessments and initiate or submit for review an additional 8 assessments, for a two-year total of 12 completed assessments and 28 initiated or submitted for review.

Beginning in FY 2005, regular evaluations by independent and external panels will provide reviews of EPA research programs' relevance, quality, and successful performance to date, in accordance with OMB's Investment Criteria for Research and Development. Reviewers will also qualitatively determine whether EPA has been successful in meeting its annual and long-term commitments for research.

Regional Scale Ecosystem Assessment Methods

In 2005 The baseline ecological condition of Western streams will be determined so that, by 2008, a monitoring framework is available for streams and small rivers in the Western U.S. that can

be used from the local to the national level for statistical assessments of condition and change to determine the status and trends of ecological resources.

In 2004 Provide Federal, state and local resource managers with a means to more effectively determine long-term trends in the condition and vitality of Eastern U.S. stream ecosystems through measurements of changes in the genetic diversity of stream fish populations.

Performance Measures	FY 2000 Actuals	FY 2001 Actuals	FY 2002 Actuals	FY 2003 Actuals	FY 2004 Pres. Bud.	FY 2005 Pres. Bud.	
A study of fish genetic diversity that demonstrates the power of this modern approach for evaluating condition and vitality of biotic communities to Federal, state and local resource managers.					1		report
Baseline ecological condition of Western streams determined						1	report

Baseline: This FY 2005 APG represents the first statistically-valid baseline for Western stream condition from state-based data. Although States and Tribes are required by the Clean Water Act (CWA) to monitor the condition of all their waters, they typically are only able to monitor at, and make scientifically defensible statements about, targeted sites that account for only a small percentage of their total waters. The monitoring framework used in the achievement of this APG removes scientific uncertainty by using a probability design approach (random sampling) to provide a more cost-effective, scientifically-defensible alternative for determining the condition of all the streams of a State or Tribe. EPA is transferring this approach to our State, Tribal, and EPA Regional partners in the Western U.S. so that they can determine the status and trends of their ecological resources. This monitoring framework also provides the scientific basis for identifying problems and needs for action, causes of harm, and successful mitigation and restoration efforts. This information will ultimately allow EPA to determine its success in achieving specific environmental outcomes.

Beginning in FY 2005, regular evaluations by independent and external panels will provide reviews of EPA research programs' relevance, quality, and successful performance to date, in accordance with OMB's Investment Criteria for Research and Development. These evaluations will include an examination of a program's design to determine the appropriateness of a program's short-, intermediate-, and long-term goals and its strategy for attaining these. Reviewers will also qualitatively determine whether EPA has been successful in meeting its annual and long-term commitments for research. Recommendations and results from these reviews will improve the design and management of EPA research programs and help to measure their progress under the Government Performance and Results Act (GPRA).

Research on Riparian Zone Restoration

In 2005 Provide technical guidance for implementing and evaluating projects to restore riparian zones, which are critical landscape components for the restoration of aquatic ecosystems and water quality, so that, by 2010, watershed managers have state-of-the-science field-evaluated tools, technical guidance, and decision-support systems for selecting, implementing, and evaluating cost-effective and environmentally-sound approaches to restore ecosystem services as part of watershed management

Performance Measures	FY 2000 Actuals	FY 2001 Actuals	FY 2002 Actuals	FY 2003 Actuals	FY 2004 Pres. Bud.	FY 2005 Pres. Bud.	
Technical guidance for implementing and evaluating projects to restore riparian zones						1	tech. guide

Baseline: This FY 2005 APG will provide State, Tribal, Regional, and local watershed managers and restoration practitioners with technical guidance for selecting, implementing, and evaluating cost-effective and environmentally-sound approaches to restore ecosystem services. Essential ecosystem services are a result of naturally occurring processes and include such necessities for human health as a reliable supply of clean water, oxygen, nutrient cycling, and soil regeneration, as well as wildlife habitat and greenspace. Habitat destruction, invasive species, and non-point source pollutants such as excess nitrogen and eroded sediments adversely impact ecosystem services by contributing to the loss of ecosystems and/or their functions. Finding effective and efficient ways to protect and restore ecosystem services is necessary for human, as well as ecological, health. Riparian zones, i.e. those areas immediately adjacent to river and stream banks, are critical components of any watershed. Without a healthy riparian zone, it would be difficult, if not impossible, to achieve water quality goals. EPA is evaluating the effectiveness of riparian restoration techniques as tools to achieve goals such as water quality criteria or the restoration of specific ecosystem functions, such as denitrification. The guidance represented by this APG will help watershed managers and restoration practitioners in decision-making and on-the-ground implementation of scientifically- and technically-defensible restoration and management techniques.

Beginning in FY 2005, regular evaluations by independent and external panels will provide reviews of EPA research programs' relevance, quality, and successful performance to date, in accordance with OMB's Investment Criteria for Research and Development. Reviewers will also qualitatively determine whether EPA has been successful in meeting its annual and long-term commitments for research.

Exposures and Effect of Environmental Research

In 2005 Provide risk assessors and managers with methods and tools for measuring exposure and effects in children, and characterizing and reducing risks to children from environmental agents in schools so that, by 2014, EPA will be able to demonstrate why some groups of people, defined by life stage, genetic factors, and health status, are more vulnerable than others to adverse effects from exposure to environmental agents.

Performance Measures	FY 2000 Actuals	FY 2001 Actuals	FY 2002 Actuals	FY 2003 Actuals	FY 2004 Pres. Bud.	FY 2005 Pres. Bud.	
Methods and tools for measuring exposure and effects in children, and characterizing and reducing risks to children from environmental agents in schools						09/30/05	methods/tools

Baseline: Current risk assessments for children are hampered by the lack of exposure and risk data and by a lack of methods that are appropriate for children. By FY 2004, EPA expects to have better data on children's exposures and on children's exposure factors. In FY 2005, research will build upon the improved data on children's exposures by compiling and analyzing the data, and translating the enhanced knowledge into better methods and approaches for measuring and estimating children's exposure and risk. The research in FY 2005 will culminate in initial approaches, ready for external peer review, on: how to conduct children's exposure and risk assessments; how to replace default uncertainty factors with data and distributions; and how to use biomarkers more appropriately in characterizing children's exposures. In addition, the increased understanding of children's exposures will provide evaluated methods for reducing their exposures and risks in schools and other indoor environments. These data, methods, and approaches will significantly improve the reliability, credibility, and transparency of children's risk assessments used by regulatory decision-makers throughout EPA and will provide to the public and to school and daycare officials tested methods to reduce children's exposures to chemical pollutants.

Beginning in FY 2005, regular evaluations by independent and external panels will provide reviews of EPA research programs' relevance, quality, and successful performance to date, in accordance with OMB's Investment Criteria for Research and Development. Reviewers will also qualitatively determine whether EPA has been successful in meeting its annual and long-term commitments for research. Recommendations and results from these reviews will improve the design and management of EPA research programs and help to measure their progress under the Government Performance and Results Act (GPRA).

Mercury Research

In 2005 Provide information on managing mercury and other co-pollutants from utility boilers so that, by 2010, there is an extensive set of data and tools available to help industry and federal, state, and local environmental management officials make decisions on the most cost-effective ways to reduce or prevent mercury releases into the environment.

Performance Measures	FY 2000 Actuals	FY 2001 Actuals	FY 2002 Actuals	FY 2003 Actuals	FY 2004 Pres. Bud.	FY 2005 Pres. Bud.	
Information on managing mercury and other co-pollutants from utility boilers						1	report

Baseline: EPA's Mercury Study Report to Congress identified emissions from coal-fired utilities as one of the most significant contributors of mercury to the air (<http://www.epa.gov/oar/mercury.html>). On December 14, 2000, EPA determined that mercury emissions from coal-fired utilities needed to be regulated. Unless some form of multi-pollutant legislation for utility boilers is passed by Congress, a Maximum Achievable Control Technology standard (MACT) will be promulgated in December 2004 to control mercury emissions with full compliance of utilities expected by December 2007. There are a variety of technological options under development that could be used to more cost-effectively achieve any required mercury reduction. These control technologies need to be evaluated before utilities make decisions on how to comply. The state-of-the-science on emission controls for mercury will be advanced by investigating the factors that impact the species of mercury in coal-fired utilities flue gas and the performance of promising mercury control technologies. Results available by the end of FY 2005 will be documented and made available for use by utilities and other interested stakeholders.

Beginning in FY 2005, regular evaluations by independent and external panels will provide reviews of EPA research programs' relevance, quality, and successful performance to date, in accordance with OMB's Investment Criteria for Research and Development. These evaluations will include an examination of a program's design to determine the appropriateness of a program's short-, intermediate-, and long-term goals and its strategy for attaining these. Reviewers will also qualitatively determine whether EPA has been successful in meeting its annual and long-term commitments for research. Recommendations and results from these reviews will improve the design and management of EPA research programs and help to measure their progress under the Government Performance and Results Act (GPRA).

Homeland Security Research

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|---------|--|
| In 2005 | Provide tools, case studies, and technical guidance so that, by FY 2006, first responders and decision-makers will have the methods, guidance documents, and technologies to enhance safety and to mitigate adverse effects of the purposeful introduction of hazardous chemical or biological materials into the environment. |
| In 2004 | Provide a database of EPA experts on topics of importance to assessing the health and ecological impacts of actions taken against homeland security that is available to key EPA staff and managers who might be called upon to rapidly assess the impacts of a significant terrorist event. |
| In 2004 | Provide to building owners, facility managers, and others, methods, guidance documents, and technologies to enhance safety in large buildings and to mitigate adverse effects of the purposeful introduction of hazardous chemical or biological materials into indoor air. |
| In 2004 | Verify two point-of-use drinking water technologies that treat intentionally introduced contaminants in drinking water supplies for application by commercial and residential users, water supply utilities, and public officials. |

Performance Measures	FY 2000 Actuals	FY 2001 Actuals	FY 2002 Actuals	FY 2003 Actuals	FY 2004 Pres. Bud.	FY 2005 Pres. Bud.	
Verify two treatment technologies for application in buildings by commercial and residential users, utilities, and public officials to treat contaminants in drinking water supplies.					2		verifications
Prepare ETV evaluations on at least 5 new technologies for detection, containment, or decontamination of chemical/biological contaminants in buildings to help workers select safe alternatives.					5		verifications
Through SBIR awards, support as least three new technologies/methods to decontaminate HVAC systems in smaller commercial buildings or decontaminate valuable or irreplaceable materials.					3		techs/methods
Prepare technical guidance for building owners and facility managers on methods/strategies to minimize damage to buildings from intentional introduction of biological/chemical contaminants.					9/30/04		guidance
A restricted access database of EPA experts with knowledge, expertise, and experience for use by EPA to rapidly assess health and ecological impacts focused on safe buildings and water security.					1		database
Risk assessment toolbox to predict and reduce the consequences of chemical/biological attacks in U.S. cities.						1	toolbox
Technical guidance for water system owners and operators on methods/strategies for minimizing damage from intentional introduction of biological/chemical contaminants						09/30/05	tech. guidance
Water system-related case studies that provide a spectrum of contingency planning situations and responses, including one specifically focused on the National Capital area						09/30/05	case studies

Baseline: EPA's homeland security research provides appropriate, effective, and rapid risk assessment guidelines and technologies to help decision-makers prepare for, detect, contain, and decontaminate building and water treatment systems against which chemical and/or biological attacks have been directed. The Agency intends to expand the state of the knowledge of potential threats, as well as its response capabilities, by assembling and evaluating private sector tools and capabilities so that preferred response approaches can be identified, promoted, and evaluated for future use by first responders, decision-makers, and the public. Examples of the types of products that will be available in FY 2005 include: sampling protocols, efficacy protocols, risk assessment tools, and threat scenario simulations. These products will enable first responders to better deal with threats to the public and the environment posed by the intentional release of toxic or infectious materials.

Beginning in FY 2005, regular evaluations by independent and external panels will provide reviews of EPA research programs' relevance, quality, and successful performance to date, in accordance with OMB's Investment Criteria for Research and Development. These evaluations will include an examination of a program's design to determine the appropriateness of a program's short-, intermediate-, and long-term goals and its strategy for attaining these. Reviewers will also qualitatively determine whether EPA has been successful in meeting its annual and long-term commitments for research. Recommendations and results from these reviews will improve the design and management of EPA research programs and help to measure their progress under the Government Performance and Results Act (GPRA).

GOAL: COMPLIANCE AND ENVIRONMENTAL STEWARDSHIP

Improve environmental performance through compliance with environmental requirements, preventing pollution, and promoting environmental stewardship. Protect human health and the environment by encouraging innovation and providing incentives for governments, businesses, and the public that promote environmental stewardship.

OBJECTIVE: IMPROVE COMPLIANCE

By 2008, maximize compliance to protect human health and the environment through compliance assistance, compliance incentives, and enforcement by achieving a 5 percent increase in the pounds of pollution reduced, treated, or eliminated, and achieving a 5 percent increase in the number of regulated entities making improvements in environmental management practices. (Baseline to be determined for 2005.)

Non-Compliance Reduction

In 2005	Through monitoring and enforcement actions, EPA will increase complying actions, pollutant reduction or treatment, and improve EMP.
In 2004	EPA will direct enforcement actions to maximize compliance and address environmental and human health problems.
In 2003	EPA directed enforcement actions to maximize compliance and address environmental and human health problems.
In 2002	Based upon one measure, this APG was not met.
In 2001	EPA directed enforcement actions to maximize compliance and address environmental and human health problems.
In 2000	Deterred and reduced noncompliance and achieved environmental and human health improvement. 74.9% of concluded enforcement actions required environmental or human health improvement, such as pollution reduction.

Performance Measures	FY 2000 Actuals	FY 2001 Actuals	FY 2002 Actuals	FY 2003 Actuals	FY 2004 Pres. Bud.	FY 2005 Pres. Bud.	
Millions of pounds of pollutants required to be reduced through enforcement actions settled this fiscal year.(core optional)	714	660	261	600	350		M pounds
Number of EPA inspections conducted (core required)	20123	17812	17668	18,880	15,500		Inspections
Pounds of pollution estimated to be reduced, treated, eliminated as a result of concluded enforcement actions.						300	Million Pounds
Percentage of concluded enforcement cases (including SEPs) requiring that pollutants be reduced, treated, or eliminated and protection of populations or ecosystems.						30	Percentage
Percentage of concluded enforcement cases (including SEPs) requiring implementation of improved env. management practices.						60	Percentage
Number of inspections, civil investigations and criminal investigations conducted.						18,500	insp&inv.
Dollars invested in improved env. performance or improved EMP as a result of concluded enforcement actions (i.e., injunctive relief and SEPs)						4 billion	Dollars
Percentage of regulated entities taking complying actions, as a result of compliance monitoring.						10	Percentage
Percent of concluded enforcement actions that require an action that result in environmental benefits and/or changes in facility management or information practices.		79	77	63	75		Percent
Number of Criminal Investigations	477	482	484	471	400		Investigations
Number of Civil Investigations	660	368	541	344	225		Investigations

Baseline: Protecting the public and the environment from risks posed by violations of environmental requirements is basic to EPA's mission. To develop a more complete picture of the results of the enforcement and compliance program, EPA has initiated a number of performance measures designed to capture the results of reducing the amount of time for significant noncompliers to return to compliance, reducing noncompliance recidivism rates, and improvements in facility process and/or management practices through behavioral changes. The baseline rates for many of these measures were established in FY00. These measures will complement the traditional enforcement measures of inspections and enforcement actions

to provide a more complete picture of environmental results from the enforcement and compliance program.

Compliance Incentives

- In 2005 Through self-disclosure policies, EPA will increase the percentage of facilities reducing pollutants or improving EMP.
- In 2004 Increase opportunities through new targeted sector initiatives for industries to voluntarily self-disclose and correct violations on a corporate-wide basis.
- In 2003 Increased opportunities through new targeted sector initiatives for industries to voluntarily self-disclose and correct violations on a corporate-wide basis.
- In 2002 The number of facilities that participated in voluntary self-audit programs, disclosed and corrected violations greatly exceeded the target.
- In 2001 EPA increased opportunities through targeted sector initiatives for industries to use one of the self-disclosure policies.
- In 2000 Increased entities self-policing and self-correction of environmental problems through use of small business and small community policies.

Performance Measures

	FY 2000 Actuals	FY 2001 Actuals	FY 2002 Actuals	FY 2003 Actuals	FY 2004 Pres. Bud.	FY 2005 Pres. Bud.	
Number of facilities that self-disclosed potential violations.	2,200						Facilities
Percentage of audits or other actions that result in the reduction, treatment, or elimination of pollutants and the protection of populations or ecosystems.						5	Percentage
Percentage of audits or other actions that result in improvements in env. management practices.						10	Percentage
Pounds of pollutants reduced, treated, or eliminated, as a result of audit agreements or other actions.						.25 million	Pounds
Dollars invested in improving environmental management practices as a result of audit agreements or other actions.						2 million	Dollars
Facilities voluntarily self-disclose and correct violations with reduced or no penalty as a result of EPA self-disclosure policies.		1754	1467	848	500		Facilities

Baseline: EPA developed its Audit/Self-Policing Policy in 1995 to encourage corporate audits and subsequent correction of self-discovered violations. That Policy as well as the Small Business Compliance Policy were modified in FY00. The Agency is working to expand the use of the

Audit Policy through aggressive outreach to specific sectors. In FY01 the performance measure was modified to reach settlements with 500 facilities to voluntarily self-disclose and correct violations. This same measure has been carried continued.

Regulated Communities

- In 2005 Through compliance assistance, EPA will increase the understanding of regulated entities, improve Environmental Management Practices, and reduce pollutants.
- In 2004 Increase the regulated community's compliance with environmental requirements through their expanded use of compliance assistance. The Agency will continue to support small business compliance assistance centers and develop compliance assistance tools such as sector notebooks and compliance guides.
- In 2003 Increased the regulated community's compliance with environmental requirements through their expanded use of compliance assistance. The Agency continued to support small business compliance assistance centers and developed compliance assistance tools such as sector notebooks and compliance guides.

Performance Measures	FY 2000 Actuals	FY 2001 Actuals	FY 2002 Actuals	FY 2003 Actuals	FY 2004 Pres. Bud.	FY 2005 Pres. Bud.	
Number of facilities, states, technical assistance providers or other entities reached through targeted compliance assistance (core optional)				721,000	500,000		Entities
Percentage of regulated entities seeking assistance from EPA-sponsored CA centers and clearinghouse reporting that they improved EMP as a result of their use of the centers or the clearinghouse.						60	Percentage
Percentage of regulated entities receiving direct compliance assistance from EPA (e.g. training, on-site visits) reporting that they improved EMP as a result of EPA assistance.						50	Percentage
% of regulated entities seeking assistance from EPA-sponsored CA centers and clearinghouse reporting that they reduced, treated, or eliminated pollution as a result of that resource.						25	Percentage
% of regulated entities seeking assistance from EPA-sponsored CA centers and clearinghouse reporting that they increased their understanding of env. rqmts. as a result of their use of the resources.						75	Percentage
% of regulated entities receiving direct CA from EPA (e.g., training, on-site visits) reporting that they increased their understanding of env. rqmts. as a result of EPA assistance.						65	percentage
% of regulated entities receiving direct assistance from EPA (e.g., training, on-site visits) reporting that they reduced, treated, or eliminated pollution, as a result of EPA assistance.						25	percentage

Baseline: EPA provides clear and consistent descriptions of regulatory requirements to assure that the community can understand its obligations. EPA supports initiatives targeted toward compliance in specific industrial and commercial sectors or with certain regulatory requirements. Compliance assistance tools range from plain-language guides, fact sheets, checklists and newsletters. New distribution methods include the on-line Clearinghouse. In FY03, EPA is planning to reach 475,000 facilities, states, or technical assistance providers through targeted compliance assistance efforts.

OBJECTIVE: IMPROVE ENVIRONMENTAL PERFORMANCE THROUGH POLLUTION PREVENTION AND INNOVATION

By 2008, improve environmental protection and enhance natural resource conservation on the part of government, business, and the public through the adoption of pollution prevention and sustainable practices that include the design of products and manufacturing processes that generate less pollution, the reduction of regulatory barriers, and the adoption of results-based, innovative, and multimedia approaches.

Reduction of Industrial / Commercial Chemicals

In 2005	Prevent, reduce and recycle hazardous industrial/commercial chemicals and improve environmental stewardship practices.
In 2004	Prevent, reduce and recycle hazardous industrial/commercial chemicals and municipal solid wastes
In 2003	FY 2003 data will be avail. in 2005 to verify the quantity of Toxic Release Inventory (TRI) pollutants released, disposed of, treated or combusted for energy recovery in 2003, (normalized for changes in industrial production) will be reduced by 200 million pounds, or 2%, from 2002.
In 2002	Data Lag
In 2001	No conclusions can be drawn regarding changes in TRI Non-recycled wastes from calendar year 2000 to calendar year 2001 without data.
In 2000	EPA exceeded its target of a reduction of 200 million pounds of TRI pollutants released.

Performance Measures	FY 2001 Actuals	FY 2002 Actuals	FY 2003 Actuals	FY 2004 Pres. Bud.	FY 2005 Pres. Bud.	
Reduction of TRI non-recycled waste (normalized)	464 Million	Not Available	Data Lag	200 Million		Lbs
Alternative feed stocks, processes, or safer products identified through Green Chemistry Challenge Award				210		Prod/proc (cum)
Number of participants in Hospitals for a Healthy Environment				2000		Participants
Quantity of hazardous chemicals/solvents eliminated through the Green Chemistry Challenge Awards Program				150 million		Lbs
For eco-friendly detergents, track the number of laundry detergent formulations developed.				36		Formulations
Percent reduction in Toxics Release Inventory (TRI) reported toxic chemical releases at Federal Facilities.					32%	Releases (Cum)
Percent reduction in both Toxics Release Inventory (TRI) chemical releases to the environment from the business sector per unit of production ("Clean Index")					20%	Releases (Cum)
Percent reduction in TRI chemicals in production-related wastes generated by the business sector per unit of production ("Green Index").					10%	Waste (Cum)
Reduction in overall pounds of pollution.					34 Billion	Pounds (Cum)
Annual cumulative quantity of water conserved					134 Million	Dollars (Cum)
Billions of gallons of water saved.					1.5 Billion	Gallons (Cum)
Billions of BTUs of energy conserved.					143 Billion	BTU (Cum)

Baseline: The baseline for the TRI non-recycled wastes measure is the amount of non-recycled wastes in 2001 reported FY2003. The baseline for eco-friendly detergents is 0 formulations in 1997. The baseline for the alternative feed stocks / processes measure is zero in 2000. The baseline for the quantity of hazardous chemicals / solvents measures is zero pounds in the year 2000. The baseline for the hospitals measure is zero in FY2001. The baseline reference point for reductions of pollution and conservation of BTUs and water will be zero for 2003. The baseline for money saved will be 2003. The baseline for reduction in CO2 will be zero for 1996. The baseline for the Clean and Green Index would be 2001 levels. The baseline for chemical releases is 2001 level. The baseline for chemical production related wastes is 2001

level. Note: Several output measures were changed to internal-only reporting status in 2005. Annual Performance measures under development for EPA's Environmentally Preferable Purchasing program for the FY2006 Annual Performance Plan.

Innovation Activities

In 2005 Performance Track members collectively will achieve an annual reduction of 600 million gallons in water use; 2.5 million in MMBTUs in energy use; 15,000 tons of solid waste; 6,000 tons of air releases; and 10,000 tons in water discharges, compared with 2001 results.

Performance Measures	FY 2000 Actuals	FY 2001 Actuals	FY 2002 Actuals	FY 2003 Actuals	FY 2004 Pres. Bud.	FY 2005 Pres. Bud.	
Specific annual reductions in five media/resource areas: water use, energy use, solid waste, air releases, and water discharges.						5	media reductions

Baseline: The baseline year is 2001. The FY 2005 specific reductions planned are that Performance Track members collectively will achieve annual reductions, compared with 2001, of 600M gallons of water used; 2.5M MMBTUs of energy used; 15,000 tons of solid waste; 6,000 tons of air releases; and 10,000 tons of water discharges.

OBJECTIVE: BUILD TRIBAL CAPACITY

Through 2008, assist all federally recognized tribes in assessing the condition of their environment, help in building their capacity to implement environmental programs where needed to improve tribal health and environments, and implement programs in Indian country where needed to address environmental issues.

Tribal Environmental Baseline/Environmental Priority

- In 2005 Assist federally recognized tribes in assessing the condition of their environment, help in building their capacity to implement environmental programs where needed to improve tribal health and environments, and implement programs in Indian country where needed to address environmental issues.
- In 2004 Percent of Tribes will have an environmental presence (e.g., one or more persons to assist in building Tribal capacity to develop and implement environmental programs).
- In 2003 In 2003, AIEO evaluated non-Federal sources of environmental data pertaining to conditions in Indian Country to enrich the Tribal Baseline Assessment Project.
- In 2002 A cumulative total of 331 environmental assessments have been completed.
- In 2001 Baseline environmental assessments were collected for 207 Tribes.
- In 2000 16% of tribal baseline information was collected by enabling a pilot demonstration model to access and display tribal information from EPA databases and data collection surveys containing environmental information. However, only four EPA/Tribal Environmental Agreements (TEAs) were signed.

Performance Measures	FY 2000 Actuals	FY 2001 Actuals	FY 2002 Actuals	FY 2003 Actuals	FY 2004 Pres. Bud. 25%	FY 2005 Pres. Bud.	
Percent of Tribes with delegated and non-delegated programs (cumulative).							Tribes
Percent of Tribes with EPA-reviewed monitoring and assessment occurring (cumulative).					20%		Tribes
Percent of Tribes with EPA-approved multimedia workplans (cumulative).					18%		Tribes
Increase tribes' ability to develop environmental program capacity of federally recognized tribes that have access to an environmental presence.						90	% Tribes
Develop or integrate EPA and interagency data systems to facilitate the use of EPA Tribal Enterprise Architecture information in setting environmental priorities and informing policy decisions.						5	Systems
Eliminate data gaps for environmental conditions for major water, land, and air programs as determined through the availability of information in the EPA Tribal Enterprise Architecture.						5	% Data Gap
Increase implementation of environmental programs in Indian country by program delegations, approvals, or primacies issued to tribes and direct implementation activities by EPA.						159	Programs
Increase the percent of tribes with environmental monitoring and assessment activities under EPA-approved quality assurance procedures.						5	% Tribes
Increase the percent of tribes w/ multimedia programs reflecting traditional use of natural resources.						5	% Tribes
Tribal environmental baseline information collected	16						% Baseline
Tribes with Tribal/EPA environmental agreements or identified environmental priorities	4						Tribes
Environmental assessments for Tribes. (cumulative)		207	331				Tribes, etc.
Non-federal sources of environmental data pertaining to conditions in Indian Country.				20			Data sources

Baseline: There are 572 tribal entities that are eligible for GAP program funding. These entities are the ones for which environmental assessments of their lands will be conducted.

OBJECTIVE: ENHANCE SCIENCE AND RESEARCH

Through 2008, strengthen the scientific evidence and research supporting environmental policies and decisions on compliance, pollution prevention, and environmental stewardship.

Research

New Technologies

- In 2005 Complete thirty verifications and four testing protocols for a program cumulative total of 280 verifications and 88 testing protocols for new environmental technologies so that, by 2009, appropriate and credible performance information about new, commercial-ready environmental technology is available that influences users to purchase effective environmental technology in the US and abroad.
- In 2004 Verify 35 air, water, greenhouse gas, and monitoring technologies so that States, technology purchasers, and the public will have highly credible data and performance analyses on which to make technology selection decisions.
- In 2003 Developed 10 testing protocols and completed 40 technology verifications for a cumulative Environmental Technology Verification (ETV) program total of 230 to aid industry, states, and consumers in choosing effective technologies to protect the public and environment from high risk pollutants.
- In 2002 EPA formalized generic testing protocols for technology performance verification, and provided additional performance verifications of pollution prevention, control and monitoring technologies in all environmental media.
- In 2001 EPA developed, evaluated, and delivered technologies and approaches that eliminate, minimize, or control high risk pollutants from multiple sectors. Delivery of the evaluative report on the Environmental Technology Verification (ETV) pilot program is delayed until FY 2002.

Performance Measures	FY 2000 Actuals	FY 2001 Actuals	FY 2002 Actuals	FY 2003 Actuals	FY 2004 Pres. Bud.	FY 2005 Pres. Bud.	
Deliver a Report to Congress on the status and effectiveness of the Environmental Technology Verification (ETV) Program during its first five years.		0					Report
Complete 20 stakeholder approved and peer-reviewed test protocols in all environmental technology categories under ETV, and provide them to testing organizations world-wide.			20				Protocols
Verify and provide information to States, technology purchasers, and the public on 40 air, water, pollution prevention and monitoring technologies for an ETV programmatic total of 230 verifications.				40			Verifications
Complete an additional 10 stakeholder approved and peer-reviewed test protocols in all environmental technology categories under ETV, and provide them to international testing organizations.				10			Protocols
Through the ETV program, verify the performance of 35 commercial-ready environmental technologies.					35		Verifications
Verifications completed						15	Verifications
Testing protocols completed						2	Protocols

Baseline: Actual environmental risk reduction is directly related to performance and effectiveness of environmental technologies purchased and used. Private sector technology developers produce almost all the new technologies purchased in the U.S. and around the world. Purchasers and permittees of environmental technologies need an independent, objective, high quality source of performance information in order to make more informed decisions; and vendors with innovative, improved, faster and cheaper environmental technologies need a reliable source of independent evaluation to be able to penetrate the environmental technology market. Through FY 2004, EPA's Environmental Technology Verification (ETV) Program will have verified approximately a programmatic total of 265 technologies, as well as making data on their performance available for public use, and will have developed 86 protocols. In FY 2005, the ETV Program will complete 30 additional verifications and four testing protocols for a cumulative total of 280 verifications and 88 testing protocols since ETV begin in 1995.

Beginning in FY 2005, regular evaluations by independent and external panels will provide reviews of EPA research programs' relevance, quality, and successful performance to date, in accordance with OMB's Investment Criteria for Research and Development. These evaluations will include an examination of a program's design to determine the appropriateness of a program's short-, intermediate-, and long-term goals and its strategy for attaining these. Reviewers will also qualitatively determine whether EPA has been successful

in meeting its annual and long-term commitments for research. Recommendations and results from these reviews will improve the design and management of EPA research programs and help to measure their progress under the Government Performance and Results Act (GPRA).